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Bureau of Land Management**

Environmental Assessment

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High Plains District August 2011 Lease Sale

High Plains District Office

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Chapter 1

1.1 Introduction

This environmental assessment (EA) has been prepared to disclose and analyze the environmental consequences beyond those already addressed in the Buffalo, Casper, and Newcastle field offices' resource management plans (RMPs) (*October 1985, December 2007, September 2000, respectively, and their amendments*) and to address new information and policy for the Bureau of Land Management's (BLM) High Plains District (HPD) portion of the August 2011 Competitive Oil and Gas Lease Sale of which 55 parcels were nominated within the High Plains District Office.

EAs assist the BLM in project planning and compliance with the National Environmental Policy Act (NEPA). They also assist the authorized officer in making an informed determination as to whether any significant impacts could result from the analyzed actions. Significance is defined by the Council on Environmental Quality (CEQ) and is found in regulation Title 40 Code of Federal Regulations (CFR) 1508.27.

An EA provides evidence for determining whether to prepare an environmental impact statement (EIS) or to support a "Finding of No Significant Impact" (FONSI). If the decision maker determines that this project has significant impacts following the analysis in the EA, then an EIS would be prepared for the project. A FONSI documents the reasons why implementation of the selected alternative would not result in "significant" environmental impacts (effects). When a FONSI statement is reached, a Decision Record (DR) may be signed approving the selected alternative which could be the proposed action, another alternative, or a combination thereof.

1.2 Background

The BLM's policy derived from various laws, including the Mineral Leasing Act of 1920 (MLA), as amended [30 U.S.C. 181 *et seq.*] and the Federal Land Policy and Management Act of 1976 (FLPMA), is to make mineral resources available for disposal and to encourage development of mineral resources to meet national, regional, and local needs.

As required under the MLA, the Federal Onshore Oil and Gas Leasing Reform Act of 1987 (FOOGLRA), Title 43 CFR 3120.1-2(a), and BLM Instruction Memorandum 2010-117, the BLM Wyoming State Office (WSO) conducts a quarterly competitive lease sale to sell available oil and gas lease parcels. A Notice of Competitive Lease Sale (NCLS) listing parcels to be offered at the auction is published by the BLM WSO in local newspapers at least 90 days before the auction is held. Lease stipulations applicable to each parcel are specified in the sale notice. The decision as to which public lands and minerals are open for leasing and what leasing stipulations may be

necessary, based on information available at the time, is made during the land use planning process. Surface management of non-BLM administered land overlaying federal minerals is determined by BLM in consultation with the appropriate surface management agency or the private surface owner.

As part of the August 2011 lease sale preparation process the BLM's WSO submitted the preliminary parcel list to the HPD which included the Buffalo Field Office (BFO), Casper Field Office (CFO) and the Newcastle Field Office (NFO) for review and processing. The respective field office (FO) staffs, in coordination and consultation with the district office (DO), reviewed the parcels to determine if they are in areas open to leasing. Where appropriate, stipulations were included or additional stipulations added; determined if new information is available since the land use plan was approved; determined if appropriate consultations have been conducted or if additional consultations are needed; and if there were special resource conditions of which potential bidders should be made aware. This single comprehensive EA was prepared by the HPD to document this review, as well as to disclose the affected environment, the anticipated impacts, the mitigation of impacts, and the recommended lease parcel disposition for all field offices. Once the draft parcel review and EA is completed, they will be posted on the BLM Wyoming webpage for a 30-day public review period. Public comments will be reviewed and taken into consideration in the completion of the final EA. The final EA with a list of available lease parcels and stipulations will be returned to the WSO and will be made available to the public through a NCLS

As mentioned previously, this EA documents the HPD, BFO, CFO, and NFO review of the 55 parcels containing 54,588.79 acres (14 parcels/21,802.3 acres in BFO, 32 parcels/30,276.2 acres in CFO, and 9 parcels/2,510.29 acres in NFO) that were nominated for the August 2011 Competitive Oil and Gas Lease Sale. It serves to verify conformance with the approved Buffalo, Casper and Newcastle land use plans and provides the rationale for deferring a parcel, deleting a parcel from the lease sale, or attaching stipulations to specific parcels.

1.3 Purpose and Need for the Proposed Action

The purpose of the competitive oil and gas lease sale is to meet the growing energy demands of the United States public through the sale and issuance of oil and gas leases. Continued sale and issuance of lease parcels is necessary to maintain economical production of oil and gas reserves owned by the United States.

The need for the competitive oil and gas lease sale is established by the BLM's responsibility under the Mineral Leasing Act of 1920 (MLA) as amended, to promote the mining of oil and gas on the public domain, and that deposits of oil and gas owned by the United States shall be subject to disposition in the form and manner provided by the MLA under the rules and regulations prescribed by the Secretary of the Interior, where applicable, through the land use planning process.

Decision to be Made: The BLM will decide whether or not to offer the nominated parcels of the HPD portion at the August 2011 Competitive Oil and Gas Lease Sale and if so, under what terms and conditions.

1.4 Conformance with BLM Land Use Plan(s)

Pursuant to 40 CFR 1508.28 and 1502.21, this EA tiers to and incorporates by reference the information and analysis contained in the following three plans: the Buffalo Resource Management Plan (BRMP) and Final Environmental Impact Statement (FEIS) (1985) and the RMP/Record of Decision (ROD) approved in October 1985; the Casper Resource Management Plan (CRMP) and Final Environmental Impact Statement (FEIS) (June 2007) and the RMP/ROD approved in December 2007; the EA also tiers to and is compliant with the Newcastle Resource Management Plan (NRMP) and Final Environmental Impact Statement (FEIS) (June 1999) and the RMP/ROD approved in August 2000 – to include FEIS and /or RMP supplements or amendments, if any.

Buffalo RMP/ROD: According to the BRMP/ROD on page 16, “MM-7: Continue to lease and allow development of federal oil and gas in the Buffalo Resource Area.” The document goes on to state that “Oil and Gas leasing and development will be subject to the standard stipulations of the Wyoming BLM and to other mitigation of surface disturbance as may be necessary.”

Casper RMP/ROD: According to the CRMP/ROD on page 2-15, Goal MR:2.1 states “Maintain oil and gas leasing, exploration, and development, while minimizing impacts to other resource values;” on the same page under decision 2002 “Parcels nominated for potential oil and gas leasing will be reviewed. Any stipulations attached to these parcels will be the least restrictive needed to protect other resource values;” and decision 2004 “The Casper Field Office is open to mineral leasing, including solid leasables and geothermal, unless specifically identified as administratively unavailable for the life of the plan for mineral leasing. These open areas will be managed on a case-by-case basis.”

Newcastle RMP/ROD: According to the NRMP/ROD on page 12, “Management Actions: Federal oil and gas leases will be issued with appropriate stipulations for protection of other resource values.”

The Buffalo, Casper, and Newcastle RMPs provide specific stipulations that would be attached to new leases offered in certain areas or occurring within particular resources. These stipulations will be detailed further in this EA.

Of the 55 parcels in the Buffalo, Casper, and Newcastle Field Offices, none of the parcels are within any areas designated as unavailable for leasing based on decisions in the above RMPs.

1.5 Relationship to Statutes, Regulations, or Other Plans

Purchasers of oil and gas leases are required to obey all applicable federal, state, and local laws and regulations including obtaining all necessary permits required should lease development occur.

BFO, CFO, and NFO wildlife biologists reviewed each parcel prior to it being offered for sale. Individual parcels may contain threatened, endangered, candidate, or BLM sensitive species (section 3.0 and appendix A). The administrative act of offering and issuing of subsequent issuance of oil and gas leases is consistent with the decisions in the Buffalo, Casper, and Newcastle RMPs, including decisions relating to threatened, endangered, candidate, and BLM sensitive species. The proposed action of offering and issuing oil and gas leases is also consistent with the biological assessments and biological opinions for these RMPs. No further consultation with the U. S. Fish and Wildlife Service (USFWS) is required.

Compliance with the National Historic Preservation Act (NHPA) is observed by following the BLM Wyoming – State Historic Preservation Officer (SHPO) protocol agreement which is authorized by the National Programmatic Agreement between the BLM, the Advisory Council on Historic Preservation, and the National Conference of SHPOs and applicable BLM handbooks. Compliance with section 106 of the NHPA takes place at the application for permit to drill (APD) stage, since it is impossible to determine the extent of surface disturbance associated with oil and gas development at the leasing stage. BFO, CFO, and NFO cultural resource specialists reviewed each parcel to determine if they contain known sites that are difficult or impossible to mitigate. Reviews included records and files searches for known sites in or near each parcel. If a parcel is leased and the BLM receives an APD, a site-specific cultural records review would be done to determine if there is a need for further cultural inventory of the areas that could be affected by subsequent surface-disturbing activities. Generally, a cultural inventory would be required prior to new surface disturbance. All historic and archaeological sites that are found eligible to be listed in the National Register of Historic Places (NRHP) or potentially eligible to be listed would be either avoided by the undertaking or mitigated, such as by having the information in the sites extracted through archaeological data recovery prior to surface disturbance.

Offering these parcels for sale and subsequent lease would not be in conflict with any local, county, or state plans.

1.6 Identification of Issues

Analysis required by the NEPA, as amended (Public Law 91-90, USC 4321 *et seq.*), was conducted by field office resource specialists who relied on site visits where access was available, personal knowledge of the areas involved, and/or review of existing databases and file information to determine if appropriate stipulations should be attached to specific parcels prior to being made available for lease.

The HPD is predominantly split estate private surface and federal minerals. Of the 55 parcels nominated for the lease sale (a total of 54,588 acres), 31 parcels are either wholly or partially federal surface and federal minerals (16,207 acres) while the other 24 parcels are entirely federal minerals underlying state or private surface (38,381 acres).

Field visits were performed on those parcels that the BLM had access or access was allowed by the surface owners. Of the 55 parcels, 22 were granted access from the landowner. Another 11 parcels were visited using public access like county or state roads. Pictures were taken at these 33 parcels and where available, GPS coordinates were taken at those photo points. Geographical information system (GIS) data and digital ortho photo quads (DOQQ) were used regardless of whether or not the field teams could visit the parcels, but were predominantly relied on for review of the 22 parcels that could not be visited.

Offering and issuing oil and gas leases is strictly an administrative action, which, in and of itself, does not cause or directly authorize any surface disturbance. After a lease has been issued, the lessee has the right to use as much of the lease lands as is necessary to explore, drill for, mine, extract, remove, and dispose of the oil and gas resources. These post-leasing actions can result in surface disturbance.

As part of the lease issuance process, nominated parcels are reviewed against the appropriate land use plans, and stipulations are attached to mitigate any known environmental or resource conflicts that may occur on a given lease parcel. As stated above, on-the-ground impacts would potentially occur when a lessee applies for and receives approval to explore, occupy, and drill on the lease. The BLM cannot determine whether a parcel offered for sale will be leased, or if it is leased, whether the lease will be explored or developed, or how the parcel may be explored or developed. According to the Tenth Circuit Court of Appeals, site-specific NEPA analysis is not possible absent concrete proposals. Filing an APD is the initial point at which a site-specific environmental appraisal can be undertaken (Park County Resource Council, Inc. v. U.S. Department of Agriculture, 10th Cir., April 17, 1987). Before the lessee files a notice of staking (NOS), an APD, or a field development plan, the BLM cannot reasonably determine where companies propose to develop wells on a given lease. Accordingly, additional separate NEPA analysis will be required at the development stage to analyze project-specific impacts associated with exploration and development of the lease. This site-specific environmental documentation would address the site-specific analysis for each proposed well location. Additional conditions of approval (mitigation) may be applied at that time.

Interdisciplinary (ID) teams consisting of a multi-disciplinary group of resource specialists for each FO as well as the DO were formed to review the parcels proposed for sale and subsequent leasing. Appendix A, Interdisciplinary Team Checklists, contains all resources within the given FO and indicates whether the resource is not present (NP), present but not impacted (NI), or present with the potential for impact (PI). Those resources that were documented as NP or NI were eliminated for further analysis

as stated in section 1.7 below with the rationale listed either in that section or under the column ‘Rationale for Determination’ in appendix A. Issues that were analyzed in this EA are air resources (including air quality, greenhouse gases, and visibility), cultural and paleontological resources, and wildlife resources (including threatened and endangered (T&E) and BLM sensitive species). Only those issues that were not addressed sufficiently in the tiered RMP EISs, for which there is new information or BLM policy has changed, are addressed in this EA. The specifics of that new information or BLM policy change is explained in chapter 3 of this document.

Traditional cultural properties (TCPs), sacred sites, or other areas that are of concern to Native American tribes have the possibility to be impacted from oil and gas development. During a recent discussion with the HPD in November of 2010, representatives from the Cheyenne River Sioux, Rosebud Sioux, Crow Creek Sioux, Lower Brule Sioux, Oglala Sioux, Sisseton Wahpeton Oyate, Yankton Sioux, and Northern Cheyenne tribes suggested that BLM address potential impacts to such sites prior to issuance of fluid mineral leases. The tribes contended that archeological inventory and inventory by Native American surveyors is necessary to identify all significant resources prior to leasing any parcel. The tribes also argued that mitigation may be impossible for certain TCPs or sacred sites, and it is counterintuitive to lease fluid minerals without prior knowledge of such sites. As is mentioned above, leasing itself does not involve surface disturbance and it is impossible to accurately assess impacts without a site-specific proposal. Additionally, the implementing regulations of NHPA at 36 CFR 800.4 (b) (2) allow federal agencies to phase the section 106 consultation process. In the case of fluid mineral leasing, an initial files search was performed by the agency at the leasing stage to screen for known historic properties including TCPs and sacred sites, but compliance with section 106 is performed during the APD stage.

1.7 Issues Considered but Eliminated from Further Analysis

The following issues were identified but eliminated from further analysis as described. Appendix A has a comprehensive listing by FO of what resources were identified for this EA and the rationale for whether or not they were included in this document.

The act of offering for sale these Federal mineral leases produces no direct, indirect, or cumulative impacts to the following resources beyond those detailed within the respective FO RMP: areas of critical environmental concern, environmental justice, farmlands, floodplains, fuels and fire management, geology and minerals, hydrologic conditions, invasive species and noxious weeds, lands, realty and access, livestock grazing and rangeland health, paleontological, recreation, socioeconomics, soils, vegetation, visual resources, wastes, water or water quality, wetlands and riparian zones, wild and scenic rivers, or woodland and forestry. The subsequent development of the lease would require an APD and/or sundry notice and, in some cases, a right-of-way application to access and transport production to or from the lease, which would all

require more site-specific review. Therefore, these resources will not be analyzed in this document.

The analysis of climate change is in its formative phase. It is not feasible to know with certainty the net impacts from the contribution of the proposed action on climate. The inconsistency in results of scientific models used to predict climate change at the global scale coupled with the lack of scientific models designed to predict climate change on regional or local scales, limits the ability to quantify potential future impacts of decisions made at this level. Greenhouse gases are analyzed in this document as it relates to the overall climate change analysis, but climate change alone will not be further analyzed in this document.

The proximity to existing and proposed Renewable Energy Development, specifically Wind Development, of parcels (WY-1108-030, WY-1108-032, and WY-1108-033) were discussed by the ID teams. The teams determined that these parcels were within 1 mile of the Rolling Hills Wind Development Project. The wind development issue was eliminated from further analysis because all parcels are located on split estate, private surface and federal minerals. Thus, if any conflicts were to occur, they would have to be addressed by the private landowner in coordination with the BLM, the wind development company, and the operator of the lease at the time of proposed exploration, development, or APD phase.

The FOs screened each parcel for wilderness, wilderness study areas, and lands with wilderness characteristics as defined by Secretarial Order 3310 were screened by the Field Offices. Screening criteria and the results are listed in appendix B by respective FO. Buffalo, Casper, and Newcastle FOs found that all of their parcels dropped out due to the first criteria of the screen [more than 5,000 acres of roadless land (yes/no)].

The parcels were evaluated against the approved implementation plan. None of the parcels in the HPD are within any Master Leasing Plan (MLP) areas as submitted by the public and determined by the Wyoming State Director. For this reason, MLPs will not be considered for analysis in this document.

1.8 Public Participation

A press release announcing the availability of the EA for comments was mailed to local media on January 7, 2011. The press release stated that the comment period for the EA would run until February 6, 2011. In addition, informational postcards were mailed to affected landowners and Native American tribes on or about January 14, 2011. For an overview of the comments and responses see section 5.3 and for the specific comments see appendix H.

1.9 Summary

This chapter presented the purpose and need for sale of those parcels within the HPD portion of the August 2011 Competitive Oil and Gas Lease Sale, as well as relevant issues. Those issues are elements of the human environment that could be affected by the implementation actions subsequent to issuance of leases that were not previously addressed in the tiered RMP EISs, for which new BLM policy has changed or for which new information exists. In order to meet the purpose and need of the proposed project in a way that resolves the issues, the BLM has considered a range of alternatives. These alternatives are presented in chapter 2. Chapter 3 gives a description of the affected environment for each resource identified. The potential environmental impacts or consequences to each resource resulting from implementation of each alternative considered in detail are analyzed in chapter 4.

Chapter 2

Proposed Action and Alternatives

2.1 Introduction

The HPD received nominations for 55 parcels (54,588.79 acres) for the August 2011 Competitive Oil and Gas Lease Sale. 14 parcels are administered by the Buffalo RMP, 32 parcels are administered by the Casper RMP and 9 parcels are administered by the Newcastle RMP. A portion of parcel WY-1108-038 (481.620 acres) is recommended for deletion due to Native American sacred concerns. Therefore 55 parcels (54,107.170 acres) will be analyzed in this document. None of the remaining parcels fell within any areas designated as unavailable for leasing in any of the three plans (see section 1.5).

2.2 Common to All Alternatives

Of the 55 parcels, one parcel is recommended for deletion in part and lease in part. Parcel WY-1108-038, Section 3 (consisting of 481.620 acres of the parcel total 963.32 total acres) contains a sacred site important to several tribes. Decision 5002 from the Casper RMP allows the field office to, “Apply tools (such as site avoidance, buffer area) to protect sensitive cultural sites as necessary.” During previous consultations, tribes that were historically present in this area recommended that the BLM include at least a 1 mile surface-disturbance restriction buffer to avoid impacts to sacred sites. Section 3 is within this 1 mile buffer and therefore that portion of the parcel should be deleted. Additionally, deleting section 3 of the parcel from consideration for leasing would assist the BLM in complying with the Native American Graves and Repatriation Act (NAGPRA) and the American Indian Religious Freedom Act (AIRFA).

Lease stipulations would be applied to each parcel uniformly across all alternatives by FO to comply with each RMP. This mitigation has been placed in chapter 3, the Affected Environment; therefore, the analysis in chapter 4, will focus on the differences between alternatives rather than the additions of mitigation.

2.3 Alternative A – No Action

The BLM NEPA Handbook (H-1790-1) states that for EAs on externally initiated proposed actions, the No Action Alternative generally means that the proposed action would not take place. In the case of a lease sale, this would mean that an expression of interest to lease (parcel nomination) would be deleted. The No Action alternative would delete all 55 parcels from the HPD portion of the August 2011 lease sale.

Any ongoing oil and gas development as well as any other land uses would continue on surrounding federal, private, and state leases.

Selection of the No Action Alternative would not preclude the re-nomination of a rejected parcel from future sale as long as the area remains open to fluid mineral leasing.

2.4 Alternative B – Proposed Action

Alternative B would offer 50 parcels (49,083.060 acres) of the 55 currently nominated for the HPD portion of the August 2011 Competitive Oil and Gas Lease Sale. The other five parcels (5,024.110 acres) would be deferred as shown below and explained in the next two paragraphs.

Parcel Number	Total Acres	Reason for Deferral
WY-1108-008	960.000	Cultural concerns
WY-1108-011	606.970	Wildlife concerns
WY-1108-014	874.070	Wildlife concerns
WY-1108-032	943.070	Cultural concerns
WY-1108-040	1,640.000	Cultural concerns
Total	5,024.110	

Two parcels (WY-1108-011 and WY-1108-014 comprising 1481.040 acres in total) in Buffalo would be deferred pending revision of certain wildlife lease stipulations and the Buffalo RMP/EIS. This deferral would reserve decisions for sage grouse core areas and sage grouse connectivity habitat for the RMP revision, allowing a broader and more comprehensive analysis of range-wide impacts consistent with federal and state conservation goals for the species. The BLM's Land Use Planning Handbook (H-1601 1) states (page 47): "During the amendment or revision process, the BLM should review all proposed implementation actions through the NEPA process to determine whether approval of a proposed action would harm resource values so as to limit the choice of reasonable alternative actions... Even though the current land use plan may allow an action, the BLM manager has the discretion to defer or modify proposed implementation-level actions ... " Leasing on approximately 40 acres within sage grouse core areas and 75 acres within sage grouse connectivity habitat would be deferred until the Draft EIS is released. At that time these parcels would be re-evaluated to determine if they can be offered and, in consideration of the range of alternatives, designated preferred alternative in the Draft EIS.

The remaining three parcels (WY-1108-032 and WY-1108-040 consisting of 2583.070 acres in the CFO and WY-1108-008 consisting of 960.000 acres in the NFO) would be deferred pending site-specific tribal consultation. Each parcel contains potentially sensitive cultural places of religious or spiritual importance to regional Native American tribes. Tribal consultation on these three areas prior to any lease decision is warranted for the identification and subsequent protection of sensitive cultural sites. In decision 5002, page 2-29, in the CFO RMP/ROD, states that the BLM will “[a]pply tools (such as site avoidance, buffer area) to protect sensitive cultural sites as necessary.” NFO RMP

states, “[a]s appropriate, specific sites on public lands will be managed for their traditional Native American cultural values” (page 8). Deferral of the three parcels would assist the BLM in complying with the AIRFA.

2.5 Alternatives C – Offer All Parcels for Sale

Alternative C would offer all 55 parcels (54,107.170 acres) for sale and subsequent leasing; the 50 parcels recommended to be leased under Alternative B, and the other five parcels recommended for deferral under Alternative B. All other aspects of this alternative are the same as the proposed action.

2.6 Alternatives Considered, but Eliminated from Further Analysis

No other action alternatives were considered by the three FO ID teams or the DO team.

Chapter 3

Affected Environment

3.1 Introduction

This chapter presents the affected environment (*i.e.*, the physical, biological, social, and economic values and resources) identified in the three FO Interdisciplinary Team Checklists (IDTCs) which can be found in appendix A and presented as issues in chapter 1 (section 1.6) of this EA. This is also where any mitigation is applied for each parcel. This chapter provides the baseline for comparison of alternatives for impacts/consequences described in chapter 4.

3.2 General Setting

The proposed lease parcels are located in Campbell, Converse, Crook, Natrona, and Niobrara counties in Wyoming. The area is characterized by somewhat flat rolling prairie with breaks and steep gullies near major hydrologic features.

3.3 Resources/Issues Identified for Analysis

3.3.1 Air Resources

In addition to the air quality information in the RMPs, new information about greenhouse gases (GHGs) and their effects on national and global climate conditions has emerged. On-going scientific research has identified the potential impacts of GHG emissions such as carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), water vapor; and several trace gases on global climate. Through complex interactions on a global scale, GHG emissions cause a net warming effect of the atmosphere, primarily by decreasing the amount of heat energy radiated by the earth back into space. Although GHG levels have varied for millennia (along with corresponding variations in climatic conditions), industrialization and burning of fossil carbon sources have caused GHG concentrations to increase measurably, and may contribute to overall climatic changes.

This EA incorporates an analysis of the contributions of the proposed action to GHG emissions and a general discussion of potential impacts to climate. Air quality and visibility are the other components of air resources, which include applications, activities and management of the air resource. Therefore, the BLM must consider and analyze the potential effects of BLM and BLM-authorized activities on air resources as part of the planning and decision-making process.

3.3.1.1 Air Quality

The U.S. Environmental Protection Agency (EPA) established air quality standards (NAAQS) for criteria pollutants. Criteria pollutants include carbon monoxide (CO),

nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM₁₀ and PM_{2.5}), sulfur dioxide (SO₂), and lead (Pb). Air pollutant concentrations greater than the NAAQS would represent a risk to human health.

EPA has delegated regulation of air quality to the State of Wyoming and is administered by the Wyoming Department of Environmental Quality. Wyoming Ambient Air Quality Standards (WAAQS) and NAAQS identify maximum limits for concentrations of criteria air pollutants at all locations to which the public has access. The WAAQS and NAAQS are legally enforceable standards. Concentrations above the WAAQS and NAAQS represent a risk to human health that, by law, require public safeguards be implemented. State standards must be at least as protective of human health as federal standards, and may be more restrictive than federal standards, as allowed by the Clean Air Act.

The counties that lie within the jurisdictional boundaries of the HPD are classified as in attainment of all state and national ambient air quality standards as defined in the Clean Air Act of 1977, as amended. Modeling conducted to date by the WYDEQ does not indicate that air quality is likely to exceed any limits specified by the Clean Air Act in the near future.

Various state and federal agencies monitor air pollutant concentrations and visibility throughout Wyoming. Table 3.1 lists the available air quality monitoring sites within the HPD and relevant sites nearby. The Wyoming Department of Environmental Quality (DEQ) operates a PM₁₀ monitor as part of the State and Local Monitoring Site (SLAMS) network in Cody, Wyoming (Park County). Additional SLAMS and Special Purpose Monitoring (SPM) sites operate in nearby counties. Monitoring sites include several IMPROVE monitors and BLM administered sites that are part of the Wyoming Air Resource Monitoring System (WARMS). Atmospheric deposition (wet) measurements of ammonium, sulfate, and various metals are taken at the Sinks Canyon, South Pass and Yellowstone Park sites, which the BLM operates as part of the National Acid Deposition Program (NADP).

Table 3.1 Air Quality Monitoring Sites Within the HPD

County	Site Name	Type of Monitor	Parameter	Operating Schedule	Location	
					Longitude	Latitude
Campbell	Thunder Basin	SPM	O ₃ , NO _x & Met	Hourly	-105.3000	44.6720
	South Campbell County	SPM	O ₃ , NO _x , PM ₁₀ & Met	1/3 (PM ₁₀) & hourly (NO _x & O ₃)	-105.5000	44.1470
	Belle Ayr Mine	SPM	NO _x & PM _{2.5}	1/3 (PM _{2.5}) & hourly (NO _x)	-105.3000	44.0990
	Wright	SPM	PM ₁₀	1/6	-105.5000	43.7580
	Gillette	SLAMS	PM ₁₀	1/6	-105.5000	44.2880

	Black Thunder Mine	SPM	PM2.5	1/3	-105.2000	43.6770
	Buckskin Mine	SPM	PM2.5	1/3	-105.6000	44.4720
	South Coal	WARMS	PM2.5 & Meteorology		-105.8378	44.9411
	Thunder Basin	IMPROVE	PM2.5, Nitrate, Ammonium, Nitric Acid, Sulfate, Sulfur Dioxide & Meteorology	1/3	-105.2874	44.6634
Johnson	Buffalo	WARMS	PM2.5, Nitrate, Ammonium, Nitric Acid, Sulfate, Sulfur Dioxide & Meteorology	1/3 (PM2.5) & 1/7 (others)	-106.0189	44.1442
	Juniper	WARMS	PM2.5 & Meteorology	1/3 (PM2.5)	-106.2289	44.2103
	Cloud Peak	IMPROVE	PM2.5, Nitrate, Ammonium, Nitric Acid, Sulfate, Sulfur Dioxide & Meteorology	1/3	-106.9565	44.3335
Sheridan	Sheridan - Highland Park	SLAMS	PM10 & PM2.5	1/3 (PM10); 1/3 & 1/6 (PM2.5)	-107.0000	44.8060
	Sheridan - Police Station	SLAMS	PM10 & PM2.5	1/1 (PM10) & 1/3 & 1/6 (PM2.5)	-107.0000	44.8330
	Arvada	SPM	PM10		-106.1000	44.6540
	Sheridan	WARMS	PM2.5, Nitrate, Ammonium, Nitric Acid, Sulfate & Sulfur Dioxide	1/3 (PM2.5) & 1/7 (others)	-106.8472	44.9336
Converse	Antelope Mine	SPM	NOx & PM2.5	1/3 (PM2.5) & hourly (NOx)	-105.4000	43.4270
Weston	Newcastle	WARMS	PM2.5, Nitrate, Ammonium, Nitric Acid, Sulfate, Sulfur Dioxide & Meteorology	1/3 (PM2.5) & 1/7 (others)	-104.1919	43.8731
	Newcastle	NADP	Wet deposition of ammonium, sulfate, metals	Weekly		

BLM assessed recent air quality conditions within the High Plains District Office boundary by examining data collected by monitors in the area, supplemented by various monitors in neighboring planning areas, as summarized in Table 3.2. The examination of this data indicates that the current air quality for criteria pollutants in the HPD is considered good overall. Based on measurements in the area, visibility in the HPD is considered excellent.

Table 3.2 Air Quality Conditions

Pollutant	Average Time	NAAQS ($\mu\text{g}/\text{m}^3$)	WAAQS ($\mu\text{g}/\text{m}^3$)	Representative Concentrations	
				($\mu\text{g}/\text{m}^3$)	Year
Carbon Monoxide ⁸	1 hour	40,000	40,000	1979	2005
	8 hours	10,000	10,000	931	2005
Nitrogen Dioxide (NO ₂) ⁴	Annual	100	100	0.004	2006
Ozone (O ₃) ⁵	8 hours	147	157	0.079	2008
Particulate Matter (PM ₁₀) ⁷	24 hours	150	150		
	Annual	None	50	17	2008
Particulate Matter (PM _{2.5}) ⁴	24 hours	35	35		
	Annual	15	15	4.52	2008
Sulfur Dioxide (SO ₂) ⁶	3 hours	1300 ¹	1,300		
	24 hours	365	260		
	Annual	80	60	0.6	2006

Sources: Wyoming DEQ 2004; EPA 2005
¹Secondary standard only, as there is no 3-hour federal primary standard for SO₂.
²Average not to be exceeded more than two times per year.
³Average not to be exceeded more than two times in any 5 consecutive days.
⁴Antelope Site 3, Converse County (56009081942602-1)
⁵To attain this standard, the 3-year average of the fourth-highest daily maximum 8-hour average O₃ concentrations measured at each monitor within an area over each year must not exceed the standard. A year of O₃ data is only considered if valid daily maximums are available for at least 75 percent of the ozone season
⁶Average filter pack concentrations for the Buffalo WARMS site
⁷City County Bldg Center And C Streets, Casper, WY (560250001)
⁸Data collected at Yellowstone National Park in 2005
NAAQS National Ambient Air Quality Standards
PM₁₀ particulate matter less than 10 microns in diameter
WARMS Wyoming Air Resource Monitoring System
 $\mu\text{g}/\text{m}^3$ micrograms per cubic meter
PM_{2.5} particulate matter less than 2.5 microns in diameter
WAAQS Wyoming Ambient Air Quality Standards

3.3.1.2 Greenhouse Gas Emissions

Greenhouse gases that are included in the US Greenhouse Gas Inventory are: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). CO₂ and methane (CH₄) are typically emitted from combustion activities or are directly emitted into the atmosphere.

Currently, the Wyoming Department of Environmental Quality (WDEQ) Air Quality Division (AQD) does not regulate greenhouse gas emissions, although these emissions are regulated indirectly by various other regulations.

Some greenhouse gases such as carbon dioxide occur naturally and are emitted to the atmosphere through natural processes and human activities. Other greenhouse gases (e.g., fluorinated gases) are created and emitted solely through human activities. The

primary greenhouse gases that enter the atmosphere as a result of anthropogenic activities include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and fluorinated gases such as hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. These synthetic gases are GHGs that are emitted from a variety of industrial processes.

Several activities occur within the HPD that may generate greenhouse gas emissions: Oil, gas, and coal development, large fires, livestock grazing, and recreation using combustion engines which can potentially generate CO₂ and methane. Oil and gas development activities can generate carbon dioxide (CO₂) and methane (CH₄). CO₂ emissions result from the use of combustion engines, while methane can be released during processing. Wildland fires also are a source of other GHG emissions, while livestock grazing is a source of methane. A description of the potential greenhouse gas emissions associated with the proposed leasing activities is included in Chapter 4.

Of the parcels that have been nominated for the HPD portion of the August 2011 Competitive Oil and Gas Lease Sale, all are located within areas defined as having high potential for occurrence of oil and gas (see RMP Reasonably Foreseeable Development scenarios (RFDs) for both Casper and Buffalo). Newcastle does not have an RFD but according to petroleum engineers and geologists within the BLM, NFO has the same potential for occurrence as the other offices as can be seen by the continued interest and development in oil and gas operations.

3.3.1.3 Visibility

There are several National Parks, National Forests, recreation areas, and wilderness areas within and surrounding the HPD. Table 3.3 lists areas designated as Class I or Class II Airsheds. National Parks, National Monuments, and some state designated Wilderness Areas are designated as Class I. The Clean Air Act “declares as a national goal the prevention of any future, and the remedying of any existing, impairment of visibility in mandatory Class I Federal areas . . . from manmade air pollution.” 42 U.S.C. § 7491(a) (1).25. Under the BLM Manual Section 8560.36, BLM lands, including wilderness areas not designated as Class I, are managed as Class II, which provides that moderate deterioration of air quality associated with industrial and population growth may occur.

Table 3.3 National Parks, Wilderness Areas, and National Monuments

Area Name	Closest Distance to High Plains District (miles)	Direction from the High Plains District	Clean Air Act Status of the Area
Badlands National Park	>100	East	Class I
Bridger Wilderness Area	90	West	Class I
Cloud Peak Wilderness Area	within	---	Class II
Devils Tower National	within	---	Class II

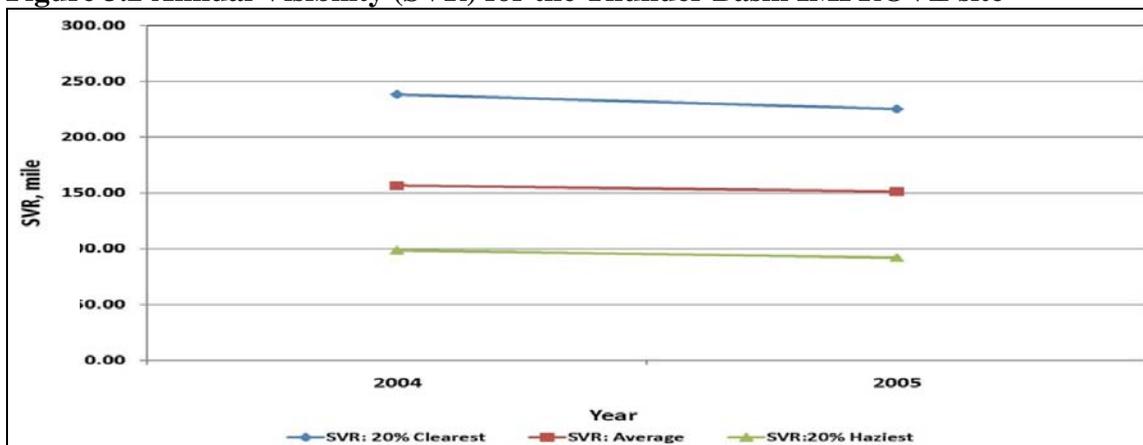
Table 3.3 National Parks, Wilderness Areas, and National Monuments

Area Name	Closest Distance to High Plains District (miles)	Direction from the High Plains District	Clean Air Act Status of the Area
Monument			
Fitzpatrick Wilderness Area	100	West	Class I
Grand Teton National Park	>100	West	Class I
Jewel Cave National Monument	<20	East	Class II
North Absaroka Wilderness Area	>100	Northwest	Class I
Teton Wilderness Area	>100	Northwest	Class I
Washakie Wilderness Area	>100	Northwest	Class I
Wind Cave National Park	<50	East	Class I
Yellowstone National Park	>100	Northwest	Class I

Source: NPS 2006

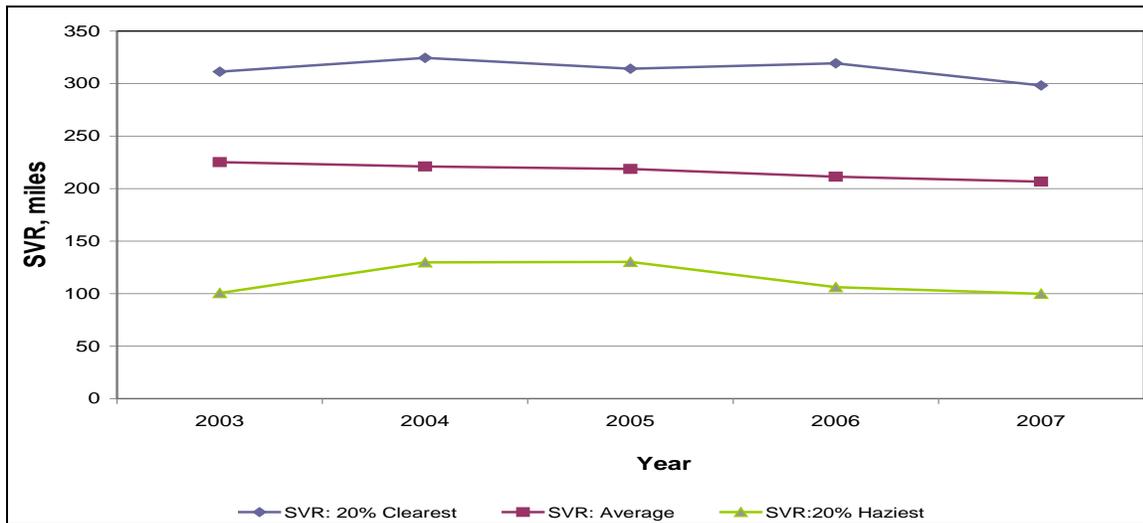
The BLM works cooperatively with several other federal agencies to measure visibility with the Inter-Agency Monitoring of Protected Visual Environments (IMPROVE) network. As noted above, data collected at the Thunder Basin National Grasslands and Cloud Peak Wilderness IMPROVE monitoring sites have been used indirectly to measure visibility in the HPD. Figure 3.2 presents visibility data for the Thunder Basin IMPROVE site for the period 2004-2005, and Figure 3.3 presents visibility data for the Cloud Peak IMPROVE site for the period 2003-2007. The data for the two sites are consistent and show very good to excellent visibility ranges within the HPD, even for the 20 percent haziest days. Although there are not enough data to discern trends at the Thunder Basin site, the five-year record at the Cloud Peak site does show a very slight degradation of visibility over this time period.

Figure 3.2 Annual Visibility (SVR) for the Thunder Basin IMPROVE site



Source: IMPROVE 2009

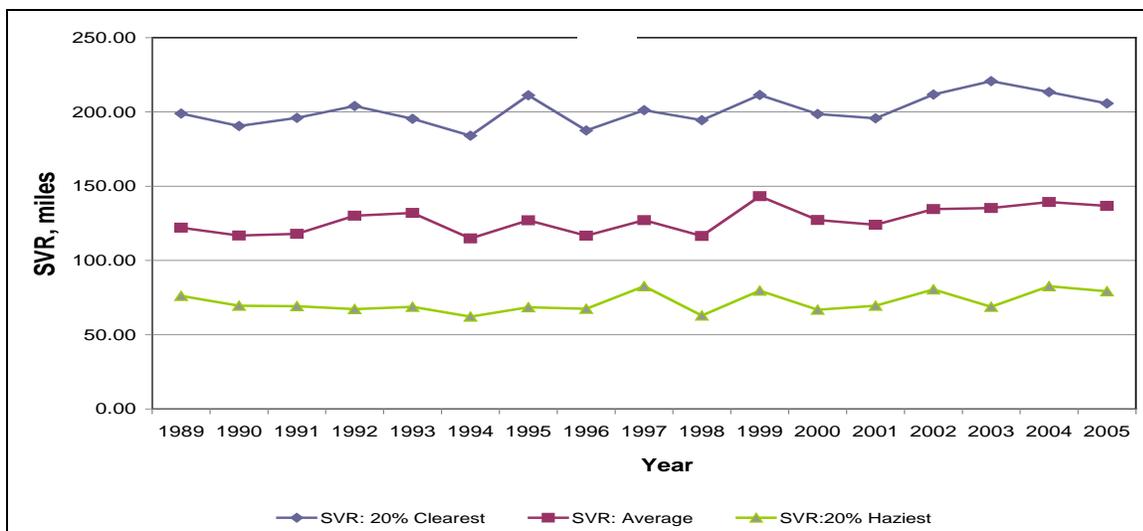
Figure 3.3 Annual Visibility (SVR) for the Cloud Peak IMPROVE site



Source: IMPROVE 2009

In addition to visibility measurements within the HPD, Figure 3.4 presents visibility estimates SVR for the Badlands National Park site, located east of the HPD, for the period 1989 to 2005. This figure shows the annual average visual range estimates and the estimates for the 20 percent clearest days and 20 percent haziest days. The visibility estimates for the Badlands site are lower than those for the Thunder Basin and Cloud Peak sites, but no real trend in visibility is discernable during this period at the Badlands monitor.

Figure 3.4 Annual Visibility (SVR) for the Badlands National Park IMPROVE site



Source: IMPROVE 2009

3.3.2 Cultural, Native American and Paleontology Resources

All parcels addressed in this EA, have the potential to contain cultural resources including archaeological sites, TCPs, and sacred sites. File searches performed by individual field offices revealed that the parcels analyzed for this EA have been inventoried in part. Prior inventories in or near the parcels located site types that include lithic scatters, large habitation sites, quarries, stone circle sites, cairns, a prehistoric burial site, a prehistoric and protohistoric antelope trapping site, a historic trail, historic trash scatters, and homesteading sites. Some of the previously recorded sites range from unevaluated to eligible for listing on the NRHP.

The 18 parcels listed below are located within the Pine Ridge topographic area. Under the Casper ROD 2007, decision 5010 these parcels will have a “minimum cultural resource block inventory size (of) 40 acres and linear inventories cover(ing) a minimum of 100 feet on either side of surface disturbance” activities.

Parcel 034 (WY-1108-034)
Parcel 036 (WY-1108-036)
Parcel 037 (WY-1108-037)
Parcel 040 (WY-1108-040)
Parcel 041 (WY-1108-041)
Parcel 042 (WY-1108-042)
Parcel 043 (WY-1108-043)
Parcel 044 (WY-1108-044)
Parcel 045 (WY-1108-045)
Parcel 046 (WY-1108-046)
Parcel 047 (WY-1108-047)
Parcel 048 (WY-1108-048)
Parcel 049 (WY-1108-049)
Parcel 050 (WY-1108-050)
Parcel 051 (WY-1108-051)
Parcel 052 (WY-1108-052)
Parcel 053 (WY-1108-053)

In the CFO parcels 032 (WY-1108-032) and 040 (WY-1108-040) are recommended for deferral pending site specific tribal consultation. Each parcel contains potentially sensitive cultural sites of religious or spiritual importance to regional Native American tribes. Tribal consultation on these two areas prior to any lease decision is required for the identification and subsequent protection of sensitive cultural sites.

In the NFO, parcel 008 (WY-1108-008) was found to be situated within the Little Missouri antelope trap study area. The size and dispersion of this cultural site has not yet been determined. An incompletely inventoried feature that may be related to this trap was found within 1 mile of this parcel. Therefore, the NFO has recommended deferral of this parcel until Native American consultation has been conducted.

The parcels addressed in the EA also have a potential to contain vertebrate fossils. Referencing the Potential Fossil Yield Classification (PFYC) system, parcels administered by the CFO are class 3 or 3a indicating a moderate potential for paleontological resources. Post-lease development proposals would be evaluated on a case-by-case basis to determine if paleontological surveys would be required.

In the NFO, parcels 002, (WY-1108-002), parcels 003, (WY-1108-003), parcels 004, (WY-1108-004), parcels 005, (WY-1108-005), parcels 006, (WY-1108-006), and parcels 007, (WY-1108-007) fell within the Lance Creek Fossil Area and will include the following controlled surface use (CSU) stipulation:

CSU (1) Surface occupancy or use may be restricted or prohibited if paleontological sites exist unless paleontological sites are avoided or the operator and surface managing agency arrive at an acceptable plan for mitigation of anticipated impacts; (2) as mapped on the Newcastle Field Office GIS database; (3) protecting Lance Creek Fossil Area paleontological values.

3.3.3 Wildlife, Threatened and Endangered, and Sensitive Species Resources

Section 7 of the Endangered Species Act (ESA) requires BLM land managers to ensure that any action authorized, funded, or carried out by the BLM is not likely to jeopardize the continued existence of any threatened or endangered species and that it avoids any appreciable reduction in the likelihood of recovery of affected species. Consultation with the FWS is required on any action proposed by the BLM or another federal agency that affects a listed species or that jeopardizes or modifies critical habitat.

The BLM's Special Status Species Policy outlined in BLM Manual 6840, Special Status Species Management, is to conserve listed species and the ecosystems on which they depend and to ensure that actions authorized or carried out by BLM are consistent with the conservation needs of special status species and do not contribute to the need to list any of these species. The BLM's policy is intended to ensure the survival of those plants that are rare or uncommon, either because they are restricted to specific uncommon habitat or because they may be in jeopardy due to human or other actions. The policy for federal candidate species and BLM sensitive species is to ensure that no action that requires federal approval should contribute to the need to list a species as threatened or endangered.

Other management direction is based on RMP management objectives, activity level plans, and other aquatic habitat and fisheries management direction, including 50 CFR 17, the BLM's Land Use Planning Handbook, Appendix C, Part E, Fish and Wildlife.

The current RMPs have evaluated the need to protect habitat necessary for the success of species identified through these regulations and policies. Three categories of

stipulations are used in the following sections. No Surface Occupancy (NSO) is the most stringent as it allows no surface disturbing actions to happen within the NSO area whether that is the habitat as mapped or a buffered area. Controlled Surface Use (CSU) is less stringent but still enforces some form of control over the area. Timing Limitations (TLS) is the least stringent and is usually a requirement that no surface disturbing activities are allowed during certain times of the year.

New information regarding the status of the Greater Sage-grouse has elevated its status from a BLM sensitive species to a federal candidate species. Policy was issued by the Wyoming BLM in December 2009 under Information Memoranda 2010-012 and 2010-013; additional policy was issued by the Washington Office BLM under Information Memoranda 2010-071.

3.3.3.1 Bald Eagle

The bald eagle is a large, primarily fish-eating raptor, although it also consumes waterfowl and carrion. Bald eagles nest in sizeable trees adjacent to large bodies of water (lakes, reservoirs, and large rivers). Nests and roost sites have been identified within the HPD; however, not all nests or roosts occur on public lands. Table 3.5 contains a list of parcels with bald eagle stipulations.

Table 3.5 August 2011 Oil and Gas Lease Parcels with Bald Eagle Stipulations

Parcel Number	Stipulation(s)	Field Office
WY-1108-010	1	Casper
WY-1108-013	3	Buffalo
WY-1108-014	3	Buffalo
WY-1108-015	3	Buffalo
WY-1108-016	3	Buffalo
WY-1108-018	3	Buffalo
WY-1108-019	3	Buffalo
WY-1108-024	3	Buffalo
WY-1108-025	3	Buffalo
WY-1108-026	3	Buffalo
WY-1108-034	2	Casper

The following stipulations apply to table 3.5.

1. NSO (1) as mapped on the Casper Field Office GIS database (2) protecting the Bald Eagle Nest.
2. NSO (1) as mapped on the Casper Field Office GIS database (2) protecting the North Fork Cheyenne River Roost.
3. CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species.

BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Buffalo RMP map; (3) protecting *Haliaeetus leucocephalus* (Bald eagle).

3.3.3.2 Black-tailed Prairie Dog

Black-tailed prairie dogs historically inhabited short grass and mixed-grass prairies throughout the United States. Habitat loss and fragmentation, disease, and eradication programs remain serious threats to the species. Many special status wildlife species are found in prairie dog towns, including the black-footed ferret, and burrowing owl, mountain plover, and swift fox nest sites. Black-tailed prairie dog habitats generally occur throughout the High Plains District; however, most suitable habitat, especially arable lands and drainage bottoms, are located on private and state land. Table 3.6 displays a list of parcels with black-tailed prairie dog stipulations.

Table 3.6 August 2011 Oil and Gas Lease Parcels with Black-tailed Prairie Dog

Stipulations

Parcel Number	Stipulation(s)	Field Office
WY-1108-010	2	Casper
WY-1108-016	1	Buffalo
WY-1108-017	1	Buffalo
WY-1108-024	1	Buffalo
WY-1108-026	1	Buffalo
WY-1108-049	2	Casper
WY-1108-050	2	Casper
WY-1108-051	2	Casper

The following stipulations apply to table 3.6.

1. CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM

may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Buffalo RMP map; (3) protecting *Cynomys ludovicianus* (black-tailed prairie dog).

2. CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Casper Field Office GIS database; (3) protecting *Cynomys ludovicianus* (Black-tailed prairie dog).

3.3.3.3 Blowout Penstemon

The blowout penstemon is endangered at the federal level based on its restricted distribution to open, early-successional habitat and regional endemic range in the Nebraska Sandhills Prairie and the Great Divide Basin in Wyoming. Habitat for blowout penstemon consists of early successional sand dunes and blowouts. Critical habitat for the blowout penstemon is not designated within the HPD, and the species is not known to occur. Table 3.7 contains a list of parcels with blowout penstemon stipulations.

Table 3.7 August 2011 Oil and Gas Lease Parcels with Blowout Penstemon Stipulations

Parcel Number	Stipulation(s)	Field Office
WY-11080-022	1	Casper
WY-11080-027	1	Casper
WY-11080-028	1	Casper
WY-11080-043	1	Casper

The following stipulations apply to table 3.7.

1. CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Casper Field Office GIS database; (3) protecting *Penstemon haydenii* (Blowout penstemon).

3.3.3.4 Greater Sage Grouse

The greater sage grouse is a candidate species for listing under provisions of the ESA as determined by the FWS and documented in a March 5, 2010 Federal Register notice declaring that listing of the greater sage grouse was warranted but precluded. Greater sage grouse are distributed in sagebrush habitat throughout the HPD. Greater Sage-grouse leks are generally at mid elevations within sagebrush habitat. Nesting and brood-rearing habitat is sometimes associated with the lek and sometimes found at a distance from the lek in sagebrush habitat. Within the HPD there are approximately 3,624,598 acres of greater sage grouse core areas (using version 3) that occur on public, private, state, and other federal lands. Greater sage grouse core areas designated by the state of Wyoming have been established to help conserve sage grouse populations and associated habitats. The BLM is currently in the process of developing management policy to for the core area strategy. These remaining suitable sagebrush habitat areas could be productive for greater sage grouse; however, fragmentation and degradation might limit the distribution and abundance of greater sage grouse. The Wyoming Game and Fish Department (WGFD) have identified core areas which represent these relatively productive areas and have suggested special management for these areas.

There are many sources of habitat fragmentation, all of which may affect the greater sage grouse. Industrial development, livestock grazing, mining, gravel pit operations, oil and gas activity, land exchanges and disposal, vegetation manipulation, fuel reduction projects, and other activities may cause an artificial component to a natural habitat condition. Structures such as power lines, towers, and industrial disruptive activities may cause avoidance and abandonment of habitat. Livestock grazing, fuels treatments, and weed infestations are factors which may cause habitat degradation depending upon severity, intensity, and design. West Nile virus, which recently has had lethal effects on

greater sage grouse in parts of Wyoming, could become an important factor in greater sage grouse survival.

Greater sage grouse have been declining across the west, which has prompted several petitions to list them as threatened under the ESA, including a recent petition that led to the March 5, 2010 finding by the FWS of warranted for listing but precluded. Population levels throughout the HPD declined during the mid 1990s. Since 2004, the levels have remained constant or slightly increased. Population growth has varied throughout the HPD based on specific local conditions, with some areas showing little change while other areas have had a recent increase in lek count numbers. Table 3.8 contains a list of parcels with greater sage grouse stipulations.

Table 3.8 August 2011 Oil and Gas Lease Parcels with Greater Sage Grouse Stipulations

Parcel Number	Stipulation(s)	Within Core Area	Field Office
WY-1108-008	7 and 8	NO, [in Connectivity Habitat]	Newcastle
WY-1108-011	1 and 3	YES	Buffalo
WY-1108-012	1 and 3	NO	Buffalo
WY-1108-013	1, 2, and 3	NO	Buffalo
WY-1108-014	1 and 3	NO, [in Connectivity Habitat]	Buffalo
WY-1108-018	1 and 3	NO	Buffalo
WY-1108-019	1 and 3	NO	Buffalo
WY-1108-020	1 and 3	NO	Buffalo
WY-1108-021	1, 2, and 3	NO	Buffalo
WY-1108-023	4 and 6	NO	Casper
WY-1108-026	1 and 3	NO	Buffalo
WY-1108-030	4 and 6	NO	Casper
WY-1108-031	4 and 6	NO	Casper
WY-1108-032	4, 5, and 6	YES	Casper
WY-1108-034	4 and 6	NO	Casper
WY-1108-036	4 and 6	NO	Casper
WY-1108-037	4 and 6	NO	Casper
WY-1108-038	4, 5, and 6	YES	Casper
WY-1108-039	4 and 6	YES	Casper
WY-1108-040	4 and 6	NO	Casper

The following stipulations apply to **Table 3.8**.

1. TLS (1) Mar 15 to Jul 15; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting nesting Greater sage-grouse.

2. CSU (1) Surface occupancy or use within 1/4 mile of a Greater sage-grouse strutting/dancing ground will be restricted or prohibited unless the operator and surface managing agency arrive at an acceptable plan for mitigation of anticipated impacts; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting Greater sage-grouse breeding habitat.
3. CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Buffalo RMP map; (3) protecting *Centrocercus urophasianus* (Greater Sage-grouse).
4. TLS (1) Mar 15 to Jul 15; (2) as mapped on the Casper Field Office GIS database; (3) protecting nesting Greater sage-grouse.
5. CSU (1) Surface occupancy or use within 1/4 mile of a Greater sage-grouse strutting/dancing ground will be restricted or prohibited unless the operator and surface managing agency arrive at an acceptable plan for mitigation of anticipated impacts; (2) as mapped on the Casper Field Office GIS database; (3) protecting Greater sage-grouse breeding habitat.
6. CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Casper Field Office GIS database; (3) protecting *Centrocercus urophasianus* (Greater Sage-grouse).

7. TLS (1) Mar 15 to Jul 15; (2) as mapped on the Newcastle Field Office GIS database; (3) protecting nesting Greater sage-grouse.
8. CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Newcastle Field Office GIS database; (3) protecting *Centrocercus urophasianus* (Greater Sage-grouse).

3.3.3.5 Raptors

Raptors include eagles, hawks, owls, falcons, and vultures. Ten species of diurnal raptors and five species of owls are known or suspected to occur within the HPD. Nine of the 10 raptor species breed in Wyoming; the remaining species—the rough-legged hawk—is a winter resident. Four of the owl species are year-round residents in the state, while the snowy owl is a winter resident only. Raptors can be found collectively in all vegetative types in the HPD. Table 3.9 contains a list of parcels with raptor stipulations.

Table 3.9 August 2011 Oil and Gas Lease Parcels with Raptor Stipulations

Parcel Number	Stipulation(s)	Field Office
WY-1108-002	2 & 3	Newcastle
WY-1108-003	2	Newcastle
WY-1108-005	2	Newcastle
WY-1108-007	2	Newcastle
WY-1108-009	2	Newcastle
WY-1108-010	1	Casper
WY-1108-023	1	Casper

WY-1108-030	1	Casper
WY-1108-031	1	Casper
WY-1108-032	1	Casper
WY-1108-035	1	Casper
WY-1108-036	1	Casper
WY-1108-038	1	Casper
WY-1108-041	1	Casper
WY-1108-042	1	Casper
WY-1108-043	1	Casper
WY-1108-044	1	Casper
WY-1108-047	1	Casper
WY-1108-049	1	Casper
WY-1108-051	1	Casper
WY-1108-054	1	Casper

The following stipulations apply to table 3.9.

1. TLS (1) Feb 1 to Jul 31; (2) as mapped on the Casper Field Office GIS database; (3) protecting nesting Raptors.
2. TLS (1) Feb 1 to Jul 31; (2) as mapped on the Newcastle Field Office GIS database; (3) protecting nesting Raptors.
3. CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Newcastle Field Office GIS database; (3) protecting nesting raptors.

3.3.3.6 Sharp-tailed Grouse

The sharp-tailed grouse are a small upland game bird that occupies grassland habitats dominated by native grasslands and woody draws. They are located within the northern portions of the BFO and the southern parts of the CFO. Table 3.10 contains a list of parcels with sharp-tailed grouse stipulations.

Table 3.10 August 2011 Oil and Gas Lease Parcels with Sharp-tailed Grouse Stipulations

Parcel Number	Stipulation(s)	Field Office
WY-1108-019	1 & 2	Buffalo
WY-1108-020	1	Buffalo
WY-1108-026	1	Buffalo

The following stipulations apply to table 3.10.

1. TLS (1) Mar 1 to Jun 30; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting nesting sharp-tailed grouse.
2. CSU (1) Surface occupancy or use within 1/4 mile of a sharp-tailed grouse strutting/dancing ground will be restricted or prohibited unless the operator and surface managing agency arrive at an acceptable plan for mitigation of anticipated impacts; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting sharp-tailed grouse breeding habitat.

3.3.3.7 Ute ladies' Tresses

The Ute ladies' -tresses is threatened at the federal level. Also a BLM sensitive species, the Ute ladies' -tresses, is a local endemic known to occur in Converse, Goshen, and Niobrara counties (Fertig 2001b). More than 50 percent of the continental range of this species occurs in Wyoming. Habitat for this perennial orchid includes riparian and wet meadow habitats. Table 3.11 contains a list of parcels with Ute ladies' tresses stipulations.

Table 3.11 August 2011 Oil and Gas Lease Parcels with Ute Ladies' Tresses Stipulations

Parcel Number	Stipulation(s)	Field Office
WY-11080-030	1	Casper
WY-11080-031	1	Casper
WY-11080-036	1	Casper
WY-11080-049	1	Casper

The following stipulations apply to table 3.11.

1. CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or

endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Casper Field Office GIS database; (3) protecting *Spiranthes diluvialis* (Ute ladies'-tresses).

Chapter 4

ENVIRONMENTAL IMPACTS

4.1 Introduction

As previously stated, the issuance of oil and gas leases is an administrative action. Nominated leases are reviewed and stipulations are attached to ensure that leasing is in conformance with the approved land use plan. On-the-ground impacts would occur only after a nominated parcel is sold, a subsequent lease is issued, and the lessee applies for and receives approval to conduct activities on the lease.

The BLM cannot determine at the leasing stage whether or not a proposed parcel will actually be sold and, if it is sold and a lease is issued, whether or not the lease would be explored or developed. Because well location(s) cannot be determined at this point, the impacts discussed in this chapter are not site-specific. Additional site-specific NEPA analysis would be conducted at the time an APD or facility application is submitted and would provide site-specific analysis for that well location or facility. Additional conditions of approval (mitigation) may be applied at that time.

According to the Tenth Circuit Court of Appeals, site-specific NEPA analysis at the leasing stage may not be possible absent concrete development proposals. Whether such site-specific analysis is required depends upon a fact-specific inquiry. Often, where environmental impacts remain unidentifiable until exploration can narrow the range of likely drilling sites, filing an APD may be the first useful point at which a site-specific environmental analysis can be undertaken (*Park County Resource Council, Inc. v. U.S. Department of Agriculture*, 10th Cir., April 17, 1987). In addition, the Interior Board of Land Appeals (IBLA) has ruled that, "BLM is not required to undertake a site-specific environmental review prior to issuing an oil and gas lease when it previously analyzed the environmental consequences of leasing the land. . . ." (*Colorado Environmental Coalition, et. al, IBLA 96-243*, decided June 10, 1999). However, when site-specific impacts are reasonably foreseeable at the leasing stage, NEPA requires the analysis and disclosure of such reasonably foreseeable site-specific impacts (*N.M ex rel. Richardson v. BLM*, 565 F.3d 683, 718-19 (10th Cir. 2009)). BLM has not received any development proposals concerning the lease parcels addressed in this EA.

4.2 Direct and Indirect Impacts

Direct effects are caused by the action and occur at the same time and place. Indirect effects are caused by the action and occur later in time or farther removed in distance but are still reasonably foreseeable.

4.2.1 Air Resources

4.2.1.1 Air Quality

4.2.1.1.1 Alternative A – No Action

Under the No Action Alternative, none of the 55 parcels (54,107.170 acres) nominated in the HPD would be offered for sale. No oil and gas development would occur on these parcels. Ongoing oil and gas development would continue on surrounding federal, private, and state leases.

A decision not to offer the 55 subject parcels for sale would not affect existing uses of these parcels. The parcels are used primarily for livestock grazing, with some dispersed recreation such as hunting and hiking. These uses typically entail vehicle travel for access and that would be expected to continue at current rates.

Selection of the No Action Alternative would not preclude the re-nomination of a deleted parcel from this sale at some point in the future, as long as the area remains open to fluid mineral leasing.

4.2.1.1.2 Alternative B – Proposed Action

Offering 50 parcels (49,083.060 acres) for competitive sale would have no direct impacts to air quality. Two parcels would be deferred because of sage grouse concerns and three because of Native American consultation. Any potential effects to air quality would occur when the leases were sold and subsequently developed. APD permitting trends within the HPD varies among the three field offices.

Over the last 10 years including 2010, leasing federal oil and gas mineral estate has resulted in a total of 13,436 APDs approved in the Buffalo Field Office, 882 APDs in Casper Field Office, and 327 APDs in the Newcastle Field Office. A total of 14,645 APDs have been approved in the HPD over these last ten years for an annual average of 1,465 APDs; 1,344 APDs per year in BFO, 88 APDs per year in CFO and 33 APDs per year in NFO. As of 2010, there are over 39,000 producing wells in the HPD consisting of: BFO with over 31,000, CFO with over 5,000 and NFO with over 3,000. Coalbed natural gas development accounts for a large proportion of the APDs approved within the HPD, specifically within the Buffalo Field Office, since the late 1990s.

Potential impacts of development could include increased air borne soil particles associated with the construction of new well pads, pipelines, or roads, exhaust emissions from drilling equipment, compressors, vehicles, dehydration and separation facilities, and volatile organic compounds during drilling or production activities. The amount of increased emissions cannot be quantified since it is unknown how many wells might be drilled, the types of equipment needed if a well were to be completed successfully (e.g. compressor, separator, dehydrator), or what technologies may be employed by a given company for drilling any new wells. The degree of impact would also vary according to the characteristics of the geologic formations from which production would occur. Emissions of all regulated pollutants under the Clean Air Act would be evaluated by the

WDEQ and, in some instances, by the BLM at the time that a specific development project is proposed.

It is not known whether the petroleum resources specific to the leases in the Proposed Action are gas or oil, or a combination thereof. The density of drilling locations depends upon the technology feasible and available (vertical, directional, or horizontal), and the geology of the hydrocarbon-bearing zone. As a result, the specific numbers of wells that could potentially be drilled as a result of the sale of the nominated parcels and subsequent issuance of leases is unknown. However, the RFD considers these assumptions and, on a field office-wide basis, is still valid for both the Buffalo and Casper field offices. NFO did not have an RFD for their RMP.

4.2.1.1.3 Alternative C – Offer All Parcels for Sale

Under this alternative, all 55 parcels (54,107.170 acres) would be offered for competitive sale in August and subsequent leases would be issued with the aforementioned stipulations. However, due to the slightly larger acreage (an additional 5,024.110 acres) under this alternative, subject to surface-disturbing activities, drilling and production, the potential for impacts are similar to, but have a slightly higher impact to air quality.

4.2.1.2 Green House Gas Emissions

4.2.1.2.1 Alternative A – No Action

Under the No Action Alternative, none of the 55 parcels nominated in the HPD would be offered for sale. No oil and gas development would occur on these parcels. Ongoing oil and gas development would continue on surrounding federal, private, and state leases.

A decision not to offer the 55 subject parcels for sale would not affect existing uses of these parcels. The parcels are used primarily for livestock grazing, with some dispersed recreation such as hunting and hiking. These uses typically entail vehicle travel for access, and that would be expected to continue at current rates.

Selection of the No Action Alternative would not preclude the re-nomination of a deleted parcel from sale at some point in the future, as long as the area remains open to fluid mineral leasing.

4.2.1.2.2 Alternative B – Proposed Action

Offering the 50 parcels (49,083.060 acres) for competitive sale would have no direct impacts to greenhouse gas emissions. Two parcels would be deferred because of sage grouse concerns and three because of Native American consultation. Any potential

effects to greenhouse gas emissions would occur when the leases were sold and subsequently developed. APD permitting trends within the HPD varies among the three field offices.

In regard to future development, the assessment of GHG emissions and climate change is in its formative phase. While it is not possible to accurately quantify potential GHG emissions in the affected areas as a result of making the proposed tracts available for leasing, some general assumptions can be made: issuing the proposed tracts may contribute to new wells being drilled.

The Center for Climate Strategies (CCS) prepared the Wyoming Greenhouse Gas Inventory and Reference Case Projection 1990-2020 (Inventory) for the WDEQ through an effort of the Western Regional Air Partnership (WRAP). This *Inventory* report presented a preliminary draft GHG emissions inventory and forecast from 1990 to 2020 for Wyoming. This report provides an initial comprehensive understanding of Wyoming's current and possible future GHG emissions. The information presented provides the state with a starting point for revising the initial estimates as improvements to data sources and assumptions are identified.

The *Inventory* report discloses that activities in Wyoming accounted for approximately 56 million metric tons (mmt) of *gross* carbon dioxide equivalent (CO₂e) emissions in 2005, an amount equal to 0.8% of total US gross GHG emissions. These emission estimates focus on activities in Wyoming and are *consumption-based*; they exclude emissions associated with electricity that is exported from the state. Wyoming's gross GHG emissions increased 25% from 1990 to 2005, while national emissions rose by only 16% from 1990 to 2004. Annual sequestration (removal) of GHG emissions due to forestry and other land-uses in Wyoming are estimated at 36 mmtCO₂e in 2005. Wyoming's per capita emission rate is more than four times greater than the national average of 25 mtCO₂e/yr. This large difference between national and state per capita emissions occurs in most of the sectors – Wyoming's emission per capita significantly exceed national emissions per capita for electricity, industrial, fossil fuel production, transportation, industrial process, and agriculture. The state's strong fossil fuel production and other industries with high fossil fuel consumption intensity, large agriculture industry, and large distances could be the reasons for the higher per capita intensity in Wyoming. This phenomenon is primarily the result of a low population base (small denominator). Between 1990 and 2005, per capita emissions in Wyoming increased, mostly due to increased activity in the fossil fuel industry, while national per capita emissions have changed relatively little.

Wyoming's gross GHG emissions are expected to continue to grow to 69 mmtCO₂e by 2020, 56% above 1990 levels. As shown in figure ES-3 of the *Inventory*, demand for electricity is projected to be the largest contributor to future emissions growth, followed by emissions associated with transportation. Although GHG emissions from fossil fuel production had the greatest increase by sector from 1990 to 2005, the growth from this

sector is projected to decline due to the assumption that carbon dioxide emissions from venting at processing plants would decrease.

As of 2010, there were approximately 59,500 producing oil and gas wells in the state and approximately 39,500 producing wells in the HPD. The BFO had over 31,000, the CFO over 5,000, and the NFO over 3,000. As of that same time, approximately 30,500 producing oil and gas wells in Wyoming were federal with about 18,000 wells within the HPD. The BFO had over 12,500, the CFO over 4,000, and the NFO almost 1,500. This accounted for approximately 59 percent of the total federal wells in Wyoming and 66 percent of the total wells. Therefore, based on the above information, GHG emissions from all wells within the HPD amounted to approximately 12.94 metric tons (mt) annually ($19.6 \text{ mt} \times 0.66 = 12.94 \text{ mt}$) assuming steady production and emission venting.

Based on this emission factor, each potential well that may be drilled on these parcels, if leased, could emit approximately 0.00059 mt of CO₂e. It is unknown what the drilling density may be for these parcels, if they were to be developed. Therefore, it is impossible to predict what level of emissions could occur from development at this stage under the Proposed Action Alternative.

4.2.1.2.3 Alternative C – Offer All Parcels for Sale

Under this alternative, all 55 parcels (54,107.17 acres) within the HPD would be offered for sale in August, and subsequent leases would be issued with the appropriate stipulations (appendices E, F, and G). However, due to the slightly larger acreage (5,024.110 acres) under this alternative subject to surface-disturbing activities, drilling, and production, the potential for greenhouse gas emissions would be similar to, but have a slightly higher probability of occurring in larger amounts, than under Alternative B.

4.2.1.3 Visibility

4.2.1.3.1 Alternative A – No Action

Under the no action alternative, none of the 55 parcels (54,107.170 acres) nominated in the HPD would be offered for sale. No oil and gas development would occur on these parcels. Ongoing oil and gas development would continue on surrounding federal, private, and state leases.

A decision not to offer the 55 subject parcels for sale would not affect existing uses of these parcels. The parcels are used primarily for livestock grazing, with some dispersed recreation such as hunting and hiking. These uses typically entail vehicle travel for access, and that would be expected to continue at current rates.

Selection of the No Action Alternative would not preclude the re-nomination of a rejected parcel from sale at some point in the future, as long as the area remains open to fluid mineral leasing.

4.2.1.3.2 Alternative B – Proposed Action

Offering 50 parcels (49,083.060 acres) for competitive sale would have no direct impacts to visibility. Two parcels would be deferred because of sage grouse concerns and three because of Native American consultation. Any potential effects to visibility would occur when the leases were sold and subsequently developed particularly during construction. Data collection for visibility would continue.

4.2.1.3.3 Alternative C – Offer All Parcels for Sale

Offering all 55 parcels (54,107.170 acres) for leasing under Alternative C could increase the opportunity for surface disturbing activities, drilling, and production. The potential for visibility impacts are similar to, but have a higher probability of occurring in larger amounts when compared to Alternative B.

4.2.1.4 Mitigation Measures for Air Resources

Best management practices (BMPs) such as those used to reduce fugitive dust emissions, air quality, and greenhouse gas emissions would help mitigate effects to these resources. Further analysis at the APD and facility application stages of development may examine possible mitigations to alleviate site-specific impacts.

The BLM holds regulatory jurisdiction over portions of natural gas and petroleum systems identified in the EPA's Inventory of US Greenhouse Gas Emissions and Sinks: *1990-2006* document. Exercise of this regulatory jurisdiction has led to development of BMPs designed to reduce emissions from field production and operations. Analysis and approval of future development on the lease parcels would include applicable and reasonable BMPs as conditions of approval (COAs) in order to reduce or mitigate GHG emissions. Additional measures developed at the project development stage could be incorporated as COAs in the approved APD.

Such mitigation measures may include, but are not limited to:

- Flare hydrocarbon and gases at high temperatures in order to reduce emissions of incomplete combustion through the use of multi-chamber combustors;
- “Green” (flareless) completions;
- Water dirt roads during periods of high use in order to reduce fugitive dust emissions;

- Require that vapor recovery systems be maintained and functional in areas where petroleum liquids are stored;
- Installation of liquids gathering facilities or central production facilities to reduce the total number of sources and minimize truck traffic;
- Use of natural gas fired or electric drill rig engines;
- Use selective catalytic reducers on diesel-fired drilling engines; and,
- Re-vegetate areas of the pad not required for production facilities to reduce the amount of dust.

According to Inventory of US Greenhouse Gas Emissions and Sinks: 1990-2006 by the EPA, data shows that adoption by industry of the BMP proposed by the EPA's Natural Gas Energy Star program has reduced emissions from oil and gas exploration and development. The BLM would work with industry to facilitate the use of the relevant BMPs for operations proposed on federal mineral leases where such mitigation is consistent with agency policy.

4.2.1.5 Residual Impacts

No residual impacts would continue from offering and issuing the leases. Any proposed development activities would be reviewed when an APD or other facility application is received. At the time of approval, further mitigation may be applied to reduce adverse impacts.

4.2.1.6 Monitoring and/or Compliance

Monitoring by the stations listed above would continue, as would data collection at the Thunder Basin National Grasslands and Cloud Peak Wilderness IMPROVE monitoring sites. Monitoring and compliance are an integral part of lease administration. As development increases, monitoring and compliance increases as well as future APDs, facility applications are approved. Site-specific review would help in application of these requirements.

4.2.2 Cultural Resources, Native American and Paleontology Resources

4.2.2.1 Alternative A – No Action

Under the No Action Alternative, none of the 55 parcels nominated in the HPD would be offered for sale. No oil and gas development would occur on these parcels. Ongoing oil and gas development would continue on surrounding federal, private, and state leases.

A decision not to offer the 55 subject parcels for sale would not affect existing uses of these parcels. The parcels are used primarily for livestock grazing, with some dispersed

recreation such as hunting and hiking. These uses typically entail vehicle travel for access, and that would be expected to continue at current rates.

Selection of the No Action Alternative would not preclude the re-nomination of a deleted parcel from sale at some point in the future, as long as the area remains open to fluid mineral leasing.

4.2.2.2 Alternative B – Proposed Action

Under this alternative, 50 parcels (49,083.060 acres) would be offered for sale while five parcels would be deferred: two because of sage grouse concerns and three because of Native American consultation.

Deferral of parcels 8, 32, and 40 (WY-1108-008, WY-1108-032, and WY-1108-040, respectively) would allow time for the BLM to consult with regional Native American tribes in order to identify and subsequently protect sensitive cultural sites before offering the parcels for sale. Each parcel contains potentially sensitive cultural places of religious or spiritual importance. Tribal consultation is required under the American Indian Religious Freedom Act (AIRFA). Consultation would also lessen the impacts as well as diminish the physical and/or setting to potential TCPs and sacred sites.

Impacts to cultural and historical resources resulting from possible future actions on the remaining 50 leases would be avoided or mitigated in consultation with the Wyoming SHPO and tribes through compliance with section 106 of the NHPA. Interested tribes would be consulted if potential TCPs or sacred sites were identified during the cultural resource inventory.

4.2.2.3 Alternative C – Offer All Parcels for Sale

Under Alternative C, all 55 parcels (54,107.170 acres) would be offered for competitive sale in August, and subsequent leases would be issued. Other cultural resources may be impacted under this alternative, but impacts would be avoided or mitigated as discussed above for the Proposed Action (Alternative B). The BLM would still comply with Section 106 of the NHPA in regards to Wyoming SHPO and Native American tribes. Interested tribes would be consulted if potential TCPs or sacred sites are identified during the cultural resource inventory.

4.2.2.4 Mitigation Measures

If necessary, additional mitigation may be required at the APD stage when all cultural resources potentially affected by a project are located, and specific impacts are known.

4.2.2.5 Residual Impacts

No residual impacts would occur from the offering the parcels for sale and issuing the leases. If lease exploration or development is proposed, the activities would be reviewed prior to permit approval. At the time of approval, further mitigation may be applied to reduce adverse impacts.

4.2.2.6 Monitoring and/or Compliance

Continued monitoring and compliance is an integral part of lease administration. When a project is constructed in an area with a high potential for buried cultural material, archaeological monitoring may be included as a condition of approval. Monitoring may also be required if development would occur near a sensitive site. Construction monitoring is performed by a qualified archeologist working in unison with construction crews. If buried cultural resources are located by the archeologist, construction is halted and the BLM consults with the Wyoming SHPO on mitigation or avoidance. Tribes occasionally recommend tribal monitors for construction projects. Individual field offices consider applying such recommendations as conditions of approval to the drilling permits at the APD stage.

Compliance with section 106 of the NHPA would take place at the APD stage. BLM would consult with the Wyoming SHPO and interested tribes at that time.

4.2.3 Wildlife, Threatened and Endangered, and Sensitive Species Resources

4.2.3.1 Alternative A – No Action

Under the No Action Alternative, none of the 55 parcels nominated in the HPD would be offered for sale. No oil and gas development would occur on these parcels. Ongoing oil and gas development would continue on surrounding federal, private, and state leases.

A decision to not offer for sale the 55 subject parcels would not affect existing uses of these parcels. These parcels are used primarily for livestock grazing, with some dispersed recreation such as hunting and hiking. These uses typically entail vehicle travel for access, and that would be expected to continue at current rates.

Selection of the No Action Alternative would not preclude the re-nomination of a deleted parcel from sale at some point in the future, as long as the area remains open to fluid mineral leasing.

Impacts to sage grouse core areas/connectivity habitats would continue from those activities associated with current land uses, such as private and state surface or mineral development, recreation, and agriculture.

Sage grouse core areas/connectivity habitats were identified by the Wyoming Governor's Sage-Grouse Implementation Team (SGIT) in consultation with the BLM. Approximately 5,536 acres of sage grouse core areas/connectivity habitats would not be developed.

4.2.3.2 Alternative B – Proposed Action

Under this alternative, 50 parcels (49,083.060 acres) would be offered for sale while five parcels would be deferred. Two parcels would be deferred because of sage grouse concerns and three because of Native American consultation.

All parcels were screened against the sage grouse core area screens (see appendix B for specific parcel determinations). IM WY-2010-013 directs the BLM to screen each parcel for sage grouse core areas. If the parcel is within a core area the BLM is to identify if sage grouse habitat is present. Under step two of the screen, FOs are directed to use mapped habitat or in cases where mapped habitat is not available, land use plan derived sage grouse stipulations, such as a TLS, are to be used as indicators of habitat presence or absence. Step three is to identify if the parcel is within 11 square miles of contiguous, manageable, unleased federal minerals. If the parcel is within this 11 mi², then the BLM's Reservoir Management Group (RMG) is contacted to identify any potential fluid mineral drainage concerns. If there are not any drainage concerns the parcel is recommended for deferral from leasing until the RMP revision or amendment is finalized. Please refer to the sage grouse core area screens in appendix B to see which parcels fall within core area and meet the manageability criteria. Post-lease projects within core would be analyzed as directed by IM WY-2010-012 or current guidance.

Approximately 4,145 acres within sage grouse core areas would be leased with the standard terms and conditions as well as site-specific resource protection stipulations attached. These are listed in chapter 3 as well as appendices E, F, and G.

In summary, the lease recommendations by parcel are as follows:

The following 30 parcels are not located within a sage grouse core area or suitable habitat as established by the criteria set in the Buffalo, Casper, or Newcastle RMPs, IM WY-2010-012, and IM WY-2010-013. Suitable habitat defined by the above named documents includes planning derived protection buffers as habitat where habitat is not currently mapped.

Parcel 001 (WY-1108-001),
Parcel 002 (WY-1108-002),
Parcel 003 (WY-1108-003),
Parcel 004 (WY-1108-004),
Parcel 005 (WY-1108-005),
Parcel 006 (WY-1108-006),
Parcel 007 (WY-1108-007),

Parcel 009 (WY-1108-009),
Parcel 010 (WY-1108-010),
Parcel 015 (WY-1108-015),
Parcel 016 (WY-1108-016),
Parcel 017 (WY-1108-017),
Parcel 022 (WY-1108-022),
Parcel 024 (WY-1108-024),
Parcel 025 (WY-1108-025),
Parcel 027 (WY-1108-027),
Parcel 028 (WY-1108-028),
Parcel 029 (WY-1108-029),
Parcel 033 (WY-1108-033),
Parcel 035 (WY-1108-035),
Parcel 045 (WY-1108-045),
Parcel 047 (WY-1108-047),
Parcel 048 (WY-1108-048),
Parcel 049 (WY-1108-049),
Parcel 050 (WY-1108-050),
Parcel 051 (WY-1108-051),
Parcel 052 (WY-1108-052),
Parcel 053 (WY-1108-053),
Parcel 054 (WY-1108-054),
Parcel 055 (WY-1108-055),

The following five parcels are either partially or entirely located within a sage grouse core area. However, the parcels are not located within suitable sage grouse nesting habitat as established by the criteria set in the Casper RMP, IM WY-2010-012, and IM WY-2010-013.

Parcel 041 (WY-1108-041),
Parcel 042 (WY-1108-042),
Parcel 043 (WY-1108-043),
Parcel 044 (WY-1108-044),
Parcel 046 (WY-1108-046),

The following 13 parcels are either partially or entirely located within suitable sage grouse nesting habitat as established by the criteria set in the Buffalo, Casper, and Newcastle RMPs, IM WY-2010-012, and IM WY-2010-013. However, the parcels are not located within a sage grouse core area. The parcels listed below are recommended to be offered for lease with appropriate stipulations because the parcels do not fit the first screening criteria outlined in IM WY-2010-13.

Parcel 012 (WY-1108-012),
Parcel 013 (WY-1108-013),
Parcel 018 (WY-1108-018),

Parcel 019 (WY-1108-019),
Parcel 020 (WY-1108-020),
Parcel 021 (WY-1108-021),
Parcel 023 (WY-1108-023),
Parcel 026 (WY-1108-026),
Parcel 030 (WY-1108-030),
Parcel 031 (WY-1108-031),
Parcel 034 (WY-1108-034),
Parcel 036 (WY-1108-036),
Parcel 037 (WY-1108-037).

Parcel 038 (WY-1108-038) and Parcel 039 (WY-1108-039) are either partially or entirely located within a sage grouse core area and suitable sage grouse nesting habitat as established by the criteria set in the Casper RMP, IM WY-2010-012, and IM WY-2010-013. Adjacent and surrounding lands have multiple valid leases, and the parcels are not within or part of 11 square miles of contiguous, manageable, unleased federal minerals.

Parcel 038 (WY-1108-038)
Parcel 039 (WY-1108-039).

The following two parcels are recommended for deferral pending revision of the Buffalo RMP. This deferral would preserve decision space (to comply with 40 CFR 1506.1) in the upcoming RMP revision for any alternatives involving sage grouse core areas and sage grouse connectivity habitat, in case an alternative is developed that would make core areas unavailable to leasing.

The BLM's Land Use Planning Handbook (H-1601 1) states (page 47) that, "During the amendment or revision process, the BLM should review all proposed implementation actions through the NEPA process to determine whether approval of a proposed action would harm resource values so as to limit the choice of reasonable alternative actions. . . . Even though the current land use plan may allow an action, the BLM manager has the discretion to defer or modify proposed implementation-level actions" Parcels comprising approximately 40 acres within sage grouse core areas and 75 acres within sage grouse connectivity habitat would be deferred until the Draft EIS is released, at which time these parcels would be re-evaluated to determine if they can be offered, in consideration of the range of alternatives and designated preferred alternative in the Draft EIS.

Parcel 011 (WY-1108-011),
Parcel 014 (WY-1108-014).

At the time development activities are proposed, BLM would conduct a site-specific review of the proposal and the current sage grouse habitat boundaries (such as the

Wyoming Governor's core areas). The BLM may require additional avoidance and/or impact minimization measures in order to manage sage grouse habitat in support of Wyoming's sage grouse conservation strategy and the WGFD's sage grouse objectives. These measures may include, but are not limited to, disturbance density limitations and surface use and timing restrictions in proximity to certain habitats (*e.g.*, severe winter relief habitat, sage-grouse leks, etc.). Restrictions and prohibitions for surface use activities may be applied for distances and time periods more restrictive than current RMP stipulation guidance if supported by site-specific NEPA analysis of a development proposal. Such restrictions could be applied as COAs for exploration and development activities associated with the lease. These measures may be necessary to meet BLM policy goals for managing sage grouse habitat and populations as special status species as directed in BLM Manual 6840.

The BLM is currently amending six RMPs across the state. Within the High Plains District, the Casper and Newcastle RMPs are currently being amended. These RMP amendments will provide for public input including scoping and comments. The goal of the RMP amendments is to implement a species conservation strategy consistent with the Wyoming Governor's Executive Order 2010-4, and BLM policy under the ESA

Well-pad, road, and pipeline development into areas currently devoid of surface disturbance could result in habitat fragmentation for some species. This habitat component could affect a variety of species, including sage grouse, mule deer, antelope, and elk. Post lease development on the parcels could result in short-term and long-term losses of wildlife habitat. Short-term habitat loss would include all initial surface disturbance associated with the project and typically would be on-going until those portions of a well pad not needed for production operations, road disturbance outside the running surface or ditches, and the pipeline disturbance are reclaimed. Long-term habitat loss would include those areas needed for production operations for the life of the well.

Some species of wildlife are more sensitive to noise and disturbance than other species, while other species habituate to types of noise or disruption. On the other hand, certain magnitudes and frequency of noise may interrupt wildlife communication and adversely impact wildlife. Depending on the intensity and frequency of occurrence of the disruption, additional disruption during critical periods (*e.g.*, winter) can impact wildlife survival and productivity.

Surface disturbing and/or disruptive activities from February 1 to July 31, may cause impacts to nesting raptors, if present. The primary impact would be from nesting disturbance which could result in nest abandonment and/or increased chick mortality. Raptors such as ferruginous hawks, golden eagles, and bald eagles are more sensitive to vehicular traffic than are others. Site-specific wildlife surveys are typically required at the APD stage.

Sharp-tailed grouse inhabit grassland habitats within the HPD area and are anticipated to be impacted by actions affecting this vegetative type. Surface disturbing and/or

disruptive activities from March 1 to June 15, may cause negative impacts to strutting or nesting grouse if present in the project area. The impacts would be from nesting disturbance which could result in nest abandonment or nest destruction from surface - disturbing or disruptive activities. Site-specific wildlife surveys are typically required at the APD stage.

Impacts from surface-disturbing activities are anticipated for black-tailed prairie dogs. Surface disturbance is anticipated to have localized adverse impacts to prairie dog habitats including temporary and permanent loss of habitats, fragmentation, and degradation of habitat. Reductions in prairie dog populations may affect other grassland species associated with prairie dog towns, including mountain plover, burrowing owl, swift fox, and black-footed ferret. Site-specific mitigation measures to help protect black-tailed prairie dogs and associated habitats would be developed at the APD stage, if necessary.

Surface-disturbing activities, such as well pad construction, road construction, and other mechanized disturbance, could impact potential habitats for special status plants, including undocumented populations. Such activities fragment habitats and alter plant community characteristics, which can isolate or adversely affect populations of special status plants. Long-term impacts such as habitat fragmentation and isolation of populations are difficult to mitigate; however, short-term impacts from surface disturbance are mitigated by reclamation and weed control. If habitat is present, site-specific surveys for all sensitive or threatened and endangered plants may be required at the APD stage.

4.2.3.3 Alternative C – Offer All Parcels for Sale

Under this alternative, all 55 parcels (54,107.170 acres) located within the HPD would be available for competitive sale in August, and subsequent leases would be issued with the stipulations detailed in appendices E, F, and G.

Under Alternative C, approximately 5,536 acres of sage grouse core areas/connectivity habitats would be available for oil and gas exploration and development activities. The potential for impacts are similar to, but have a higher probability of occurring and at a greater intensity, as under Alternative B. Without conformance with the Wyoming sage grouse core area conservation strategy, it is likely that the sage grouse could eventually be listed as a T&E species.

Impacts associated with bald eagles, black-tailed prairie dogs, blowout penstemon, nesting raptors, sharp-tailed grouse, and Ute ladies-tresses would be the same as those described under Alternative B.

4.2.3.4 Mitigation Measures

Adding stipulations for parcels within the Buffalo, Casper, and Newcastle RMP's for mapped habitat are recommended to ensure continued population and habitat objectives for the greater sage grouse. Additional mitigation and/or COAs for any species would be identified at the development stage to further reduce impacts associated with oil and gas development.

4.2.3.5 Residual Impacts

No residual impacts would occur from the offering and issuing the leases. If a lease is developed, there would be heavy construction equipment working. Due to the extent of work and the surface disturbance and disruptive activities caused by construction activities, it is possible that wildlife populations and habitats could be impacted by these activities. These activities would be further analyzed during the site-specific review conducted when an APD or other facility application is received. At the time of approval, further mitigation may be applied to reduce adverse impacts.

4.2.3.6 Monitoring and/or Compliance

Continued monitoring and compliance is an integral part of lease administration. When a project is constructed in area with suitable species' habitat, wildlife and T&E surveys and/or monitoring may be required as a condition of approval. Surveys are performed by a qualified wildlife biologist working in unison with the operator. Coordination with the WGFD on mitigation or avoidance criteria is conducted before surface disturbance or disruptive activities were to take place, in some instances. Individual field offices may consider applying WGFD recommendations as conditions of approval to the drilling permits at the APD stage.

Consultation with the FWS under section 7 of the ESA would take place at the APD stage, if necessary.

4.3 Cumulative Impacts Analysis

The cumulative impacts assessment area for this EA is the HPD which consists of BFO, CFO, and NFO. Analysis of cumulative impacts for RFD scenarios of oil and gas wells on public lands is presented in the respective RMPs. Potential development of all available federal minerals in the field office, including those parcels listed in the Proposed Action, was included as part of the analysis.

Under Alternative A, the No Action Alternative, there would be no cumulative impacts to any of the resources listed above except for those activities on state and private lands or other BLM authorized activities.

As of 2010, there were over 59,000 producing oil and gas wells in the state and over 39,000 producing wells in the HPD. The BFO had over 31,000, CFO, over 5,000, and the NFO over 3,000. At that same time, over 30,000 producing oil and gas wells in Wyoming were federal with over 18,000 wells within the HPD. The BFO had over 12,500, the CFO over 4,000, and the NFO with almost 1,500. When compared to the total GHG emission estimates from the number of federal oil and gas wells in the state, the average number of oil and gas wells drilled annually within the HPD and probable GHG emission levels represent an incremental contribution to the total regional and global GHG emission levels. As oil and natural gas production technology continues to improve in the future, it could be assumed that GHG emissions may be reduced.

Estimating the current level of emissions and projecting future production of oil and gas is difficult to forecast with the mix of drivers: economics, resource supply, demand, and regulatory procedures. The assumptions used for the projections are based on recent trends or state production trends in the near-term, and Annual Energy Outlook 2006 (AEO 2006) growth rates through 2020. These assumptions do not include any significant changes in energy prices, relative to today's prices. Large price swings, resource limitations, or changes in regulations could significantly change future production and the associated GHG emissions. Other uncertainties include the volume of GHGs vented from gas processing facilities in the future, any commercial oil shale or coal-to-liquids production, and potential emissions-reducing improvements in oil and gas production, processing, and pipeline technologies.

Cultural, Native American, Paleontological Resources, Wildlife, Threatened and Endangered, and Sensitive Species Resources the cumulative impact of 50 more parcels leased would be an incremental increase to the overall total parcels currently leased in the State. Any development would require APD and facility applications to then analyze the impacts for proposed development. That analysis may include surveys for these resources. Cumulative impacts would be further considered and, if necessary, mitigated.

Under Alternative C, there would be an incremental increase when compared to cumulative impacts for Alternative B due to the addition of five more parcels. Again, any development would require APD and facility applications to then analyze the impacts for that development. That analysis would include surveys for cultural, Native American, paleontological resources, wildlife, T&E, and sensitive species resources. Cumulative impacts would be further analyzed in detail and mitigated for at this time.

Chapter 5

Consultation and Coordination

5.1 Introduction

The issues identified in chapter 1 (section 1.6) are analyzed in detail in chapter 4. The Interdisciplinary Team Checklist in appendix A and the rationale for issues that were considered but not analyzed further (section 1.7) were identified through the public and agency involvement process described in sections 5.2 and 5.3.

5.2 Persons, Groups, and Agencies Consulted

Table 5-1

List of all Persons, Agencies and Organizations Consulted for Purposes of this EA

Name	Purpose & Authorities for Consultation or Coordination	Findings & Conclusions
Joe Sandrini	Wyoming Game and Fish Department – Biologist	See project file
Bud Stewart	Wyoming Game and Fish Department –Dept. Energy Development Biologist	See project file

5.3 Summary of Public Participation

5.3.1 Comment Analysis

The HPD received 5 comment letter resulting in 93 comments on the EA. Four letters consisted of actual comments on the EA and one was a recommendation for selection of Alternative B. A summary of the comments and responses to those comments are attached to this EA under appendix H.

5.3.2 List of Commentors

Biodiversity Conservation Alliance/Californians for Western Wilderness
(Submitted as one comment)
Center for Native Ecosystems
DOI Fish and Wildlife Service
Wyoming Game and Fish Department
Powder River Basin Resource Council/Clark Resource Council/Pavillion Area
Concerned Citizens (submitted as one comment)

5.3.3 Response to Public Comment:

See appendix H for specific responses to comments.

5.4 List of Preparers

Table 5.4 List of Preparers

Name	Title	Responsible for the Following Section(s) of this Document
Mike Robinson	DO Resource Advisor, Energy, Lands, and Minerals.	Project Manager
G.L. "Buck" Damone III	BFO, Archaeologist	Archaeology
Shane Gray	CFO, Wildlife Biologist	Wildlife, Threatened and Endangered Species and Special Status Species
John Kelley	BFO, Planning and Environmental Coordinator	Overall Reviews
Kathleen Lacko	CFO, Planning and Environmental Coordinator	Air Resources and NEPA
Andrea Meeks	Solid Mineral Specialist	Coal Reviews
George Soehn	DO Resource Advisor, Renewable Resources	Overall Reviews
Debby Green	BFO, Natural Resource Specialist	BFO Lead
David Korzilius	CFO, Natural Resource Specialist	CFO Lead
Rod Randall	NFO, Physical Scientist	NFO Lead
Alice Tratebas	NFO Archaeologist	Archaeology
Nathaniel West	NFO Wildlife Biologist	Wildlife, Threatened and Endangered Species and Special Status Species
Allison Barnes	BFO Outdoor Recreation Planner	
Donald Brewer	BFO Wildlife Biologist	Wildlife, Threatened and Endangered Species and Special Status Species
Heather O'Brien	BFO Petroleum Engineer	
Victor Xuan	BFO Petroleum Engineer	

5.5 List of Reviewers

Name	Title	Responsible for the Following Section(s) of this Document
Travis Bargsten	Physical Scientist	BLM State Office Review
Christopher Carlton	Planning and Environmental Coordinator	BLM State Office Review

APPENDICES

APPENDIX A

INTERDISCIPLINARY TEAM CHECKLIST

BFO

DETERMINATION OF STAFF: (Choose one of the following abbreviated options for the left column)

NP = not present in the area impacted by the proposed or alternative actions

NI = present, but not affected to a degree that detailed analysis is required

PI = present with potential for relevant impact that need to be analyzed in detail in the EA

Determination	Resource	Rationale for Determination*
PI	Air Quality	Impacts of surface disturbing activities on air quality were analyzed in the 2003 Powder River RMP/FEIS (pgs 4-354-404). New information and policy changes are discussed further in the EA.
NP	Areas of Critical Environmental Concern	No effects, there are no ACECs identified within the subject parcels.
PI	Cultural Resources	Impacts of surface disturbing activities were analyzed in the Powder River RMP/FEIS (pgs 4-152-179). New information and policy changes are discussed further in the EA.
NI	Environmental Justice	No effects associated with leasing beyond what is currently addressed in the Powder River RMP/FEIS.
NP	Farmlands (Prime or Unique)	No effects associated with leasing, as there are no Farmlands (Prime or Unique) identified within the subject parcels.
PI	Fish and Wildlife Excluding FWS Designated Species	New information and policy changes are discussed further in the EA.
NI	Floodplains	No effects associated with leasing beyond what is currently addressed in the RMP. Impacts of surface disturbing activities were analyzed in the Powder River RMP/FEIS (pgs 4-152-179).
NI	Fuels/Fire Management	No effects associated with leasing beyond what is currently addressed in the RMP.
NI	Geology / Mineral Resources/Energy Production	No effects beyond what is currently addressed in the RMP. Impacts of surface disturbing activities were analyzed in the Powder River RMP/FEIS (pgs 3-57-70; 4-125-134)
PI	Greenhouse Gas Emissions**	New information and policy changes are discussed further in the EA.
NI	Hydrologic Conditions	No effects associated with leasing beyond what is currently addressed in the RMP. Impacts of surface disturbing activities were analyzed in the Powder River RMP/FEIS (pgs 4-50 and 4-176).
NI	Invasive Species/Noxious Weeds (EO 13112)	No effects associated with leasing beyond what is currently addressed in the RMP. Impacts of surface disturbing activities were analyzed in the Powder River RMP/FEIS (pgs 4-158-160).
NI	Lands/Access	No effects associated with leasing beyond what is currently addressed in the RMP. Impacts of surface disturbing activities

Determination	Resource	Rationale for Determination*
		were analyzed in the Powder River RMP/FEIS (pgs 4-298-302)
NI	Livestock Grazing	No effects associated beyond what is currently addressed in the RMP. Impacts of surface disturbing activities were analyzed in the Powder River RMP/FEIS (pgs 4-293).
PI	Migratory Birds.	New information and policy changes are discussed further in the EA.
PI	Native American Religious Concerns	Impacts of surface disturbing activities were analyzed in the Powder River RMP/FEIS (pgs 4-152-179). New information and policy changes are discussed further in the EA.
PI	Paleontology	Impacts of surface disturbing activities were analyzed in the Powder River RMP/FEIS (pgs 4-152-179). New information and policy changes are discussed further in the EA.
NI	Rangeland Health Standards	No effects associated with leasing beyond what is currently addressed in the RMP. Impacts of surface disturbing activities were analyzed in the Powder River RMP/FEIS (pgs 4-293).
NI	Recreation	No effects associated with leasing beyond what is currently addressed in the RMP. Impacts of surface disturbing activities were analyzed in the Powder River RMP/FEIS (pgs4-151-355).
NI	Socio-Economics	No effects associated with leasing beyond what is currently addressed in the RMP. The affects to socio-economic resources were analyzed in the Powder River RMP/FEIS (pgs 4-336-369).
NI	Soils	No effects associated with leasing beyond what is currently addressed in the RMP. Impacts of surface disturbing activities were analyzed in the Powder River RMP/FEIS with appropriate mitigation measures attached to lease parcels.
PI	Threatened, Endangered or Candidate Plant Species	Effects of surface disturbing activities were analyzed in the Powder River RMP/FEIS (pgs 4-216-273). New information and policy changes are discussed further in the EA.
PI	Threatened, Endangered or Candidate Animal Species	Effects of surface disturbing activities were analyzed in the Powder River RMP/FEIS (pgs 4-216-273). New information and policy changes are discussed further in the EA.
NI	Wastes (hazardous or solid)	No effects associated with leasing beyond what is currently addressed in the Powder River RMP/FEIS.
NI	Water Resources/Quality (drinking/surface/ground)	No effects associated with leasing beyond what is currently addressed in the Powder River RMP/FEIS.
NI	Wetlands/Riparian Zones	No effects associated with leasing beyond what is currently addressed in the Powder River RMP/FEIS.
NP	Wild and Scenic Rivers	No effects associated with leasing, as there are no Wild and Scenic Rivers identified within the subject parcels.
NP	Wild Horses and Burros	No effects associated with leasing.

Determination	Resource	Rationale for Determination*
NP	Wilderness/WSA	No effects associated with leasing, as there are no Wilderness or WSAs identified within the subject parcels.
NP	Wilderness Characteristics, Areas with	All parcels were screened to determine if wilderness characteristics were present. Screening forms are located in the Buffalo Field Office.
NP	Woodland / Forestry	No effects associated with leasing beyond what is currently addressed in the Buffalo RMP.
NI	Vegetation Excluding USFW Designated Species	No effects associated with leasing beyond what is currently addressed in the RMP. Effects of surface disturbing activities were analyzed in the Powder River RMP/FEIS (pgs 4-216-273).
NI	Visual Resources	No effects associated with leasing beyond what is currently addressed in the RMP. Impacts of surface disturbing activities were analyzed in the Powder River RMP/FEIS with appropriate mitigation measures attached to lease parcels. In addition the VRM BMPs would be implemented on a site specific basis under a site specific NEPA process.

**INTERDISCIPLINARY TEAM CHECKLIST
CFO**

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Determination	Resource	Rationale for Determination*
PI	Air Quality	New information and policy changes are discussed further in the EA.
NP	Areas of Critical Environmental Concern	No effects associated with leasing, as there are no ACECs identified within the subject parcels.
PI	Cultural Resources	New information and policy changes are discussed further in the EA.
NP	Environmental Justice	No effects associated with leasing beyond what is currently addressed in the Casper RMP.
NP	Farmlands (Prime or Unique)	No effects associated with leasing, as there are no Farmlands (Prime or Unique) identified within the subject parcels.
PI	Fish and Wildlife Excluding USFW Designated Species	New information and policy changes are discussed further in the EA.
NI	Floodplains	No effects associated with leasing beyond what is currently addressed in the Casper RMP.
NP	Fuels/Fire Management	No effects associated with leasing beyond what is currently addressed in the Casper RMP.
PI	Greenhouse Gas Emissions**	New information and policy changes are discussed further in the EA.
NI	Geology / Mineral Resources/Energy Production	No effects associated with leasing beyond what is currently addressed in the Casper RMP.
NI	Hydrologic Conditions	No effects associated with leasing beyond what is currently addressed in the Casper RMP.
NI	Invasive Species/Noxious Weeds (EO 13112)	No effects associated with leasing beyond what is currently addressed in the Casper RMP.
NI	Lands/Access	No effects associated with leasing beyond what is currently addressed in the Casper RMP.
NI	Livestock Grazing	No effects associated with leasing beyond what is currently addressed in the Casper RMP.
PI	Migratory Birds.	New information and policy changes are discussed further in the EA.
PI	Native American Religious Concerns	New information and policy changes are discussed further in the EA.
NI	Paleontology	New information and policy changes are discussed further in the EA.
NP	Rangeland Health Standards	No effects associated with leasing beyond what is currently addressed in the Casper RMP.

Determination	Resource	Rationale for Determination*
NI	Recreation	No effects associated with leasing beyond what is currently addressed in the Casper RMP.
NI	Socio-Economics	No effects associated with leasing beyond what is currently addressed in the Casper RMP.
NI	Soils	No effects associated with leasing beyond what is currently addressed in the Casper RMP.
PI	Threatened, Endangered or Candidate Plant Species	New information and policy changes are discussed further in the EA.
PI	Threatened, Endangered or Candidate Animal Species	New information and policy changes are discussed further in the EA.
NP	Wastes (hazardous or solid)	No effects associated with leasing beyond what is currently addressed in the Casper RMP.
NI	Water Resources/Quality (drinking/surface/ground)	No effects associated with leasing beyond what is currently addressed in the Casper RMP.
NI	Wetlands/Riparian Zones	No effects associated with leasing beyond what is currently addressed in the Casper RMP.
NP	Wild and Scenic Rivers	No effects associated with leasing, as there are no Wild and Scenic Rivers identified within the subject parcels.
NP	Wild Horses and Burros	No effects associated with leasing beyond what is currently addressed in the Casper RMP.
NP	Wilderness/WSA	No effects associated with leasing, as there are no Wilderness or WSAs identified within the subject parcels.
NP	Wilderness Characteristics, Areas with	All parcels were screened to determine if wilderness characteristics were present. Screening forms are located in the Casper Field Office.
NP	Woodland / Forestry	No effects associated with leasing beyond what is currently addressed in the Casper RMP.
NI	Vegetation Excluding USFW Designated Species	No effects associated with leasing beyond what is currently addressed in the Casper RMP.
NI	Visual Resources	No effects associated with leasing beyond what is currently addressed in the Casper RMP.

**INTERDISCIPLINARY TEAM CHECKLIST
NFO**

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PI = present with potential for relevant impact that need to be analyzed in detail in the EA

Determination	Resource	Rationale for Determination*
PI	Air Quality	New information and policy changes are discussed further in the EA.
NP	Areas of Critical Environmental Concern	No effects associated with leasing, as there are no ACECs identified within the subject parcels.
PI	Cultural Resources	New information and policy changes are discussed further in the EA.
NI	Environmental Justice	No effects associated with leasing beyond what is currently addressed in the Newcastle RMP.
NI	Farmlands (Prime or Unique)	No effects associated with leasing beyond what is currently addressed in the Newcastle RMP.
PI	Fish and Wildlife Excluding USFW Designated Species	New information and policy changes are discussed further in the EA.
NI	Floodplains	No effects associated with leasing beyond what is currently addressed in the Newcastle RMP.
NI	Fuels/Fire Management	No effects associated with leasing beyond what is currently addressed in the Newcastle RMP.
PI	Greenhouse Gas Emissions	New information and policy changes are discussed further in the EA.
NI	Geology / Mineral Resources/Energy Production	No effects associated with leasing beyond what is currently addressed in the Newcastle RMP.
NI	Hydrologic Conditions	No effects associated with leasing beyond what is currently addressed in the Newcastle RMP.
NI	Invasive Species/Noxious Weeds (EO 13112)	No effects associated with leasing beyond what is currently addressed in the Newcastle RMP.
NI	Lands/Access	No effects associated with leasing beyond what is currently addressed in the Newcastle RMP.
NI	Livestock Grazing	No effects associated with leasing beyond what is currently addressed in the Newcastle RMP.
PI	Migratory Birds.	New information and policy changes are discussed further in the EA.
PI	Native American Religious Concerns	New information and policy changes are discussed further in the EA.
PI	Paleontology	New information and policy changes are discussed further in the EA.
NI	Rangeland Health Standards	No effects associated with leasing beyond what is currently addressed in the Newcastle RMP.

Determination	Resource	Rationale for Determination*
NI	Recreation	No effects associated with leasing beyond what is currently addressed in the Newcastle RMP.
NI	Socio-Economics	No effects associated with leasing beyond what is currently addressed in the Newcastle RMP.
NI	Soils	No effects associated with leasing beyond what is currently addressed in the Newcastle RMP.
PI	Threatened, Endangered or Candidate Plant Species	New information and policy changes are discussed further in the EA.
PI	Threatened, Endangered or Candidate Animal Species	New information and policy changes are discussed further in the EA.
NI	Wastes (hazardous or solid)	No effects associated with leasing beyond what is currently addressed in the Newcastle RMP.
NI	Water Resources/Quality (drinking/surface/ground)	No effects associated with leasing beyond what is currently addressed in the Newcastle RMP.
NI	Wetlands/Riparian Zones	No effects associated with leasing beyond what is currently addressed in the Newcastle RMP.
NP	Wild and Scenic Rivers	No effects associated with leasing, as there are no Wild and Scenic Rivers identified within the subject parcels.
NP	Wild Horses and Burros	No effects associated with leasing, as there are no Wild Horses and Burros within the subject parcels.
NP	Wilderness/WSA	No effects associated with leasing, as there are no Wilderness or WSAs identified within the subject parcels.
NP	Wilderness Characteristics, Areas with	All parcels were screened to determine if wilderness characteristics were present. Screening forms are located in the Newcastle Field Office. There are no areas identified with Wilderness Characteristics within the Newcastle Field Office.
NI	Woodland / Forestry	No effects associated with leasing beyond what is currently addressed in the Newcastle RMP.
NI	Vegetation Excluding USFW Designated Species	No effects associated with leasing beyond what is currently addressed in the Newcastle RMP.
NI	Visual Resources	No effects associated with leasing beyond what is currently addressed in the Newcastle RMP.

APPENDIX B

Leasing Screens

Buffalo Field Office

Wilderness Review Checklist for Oil and Gas Lease Parcels

Sec. 603 (43 USC 1782). The Wilderness Act states:

“A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.”

“The word ‘roadless’ refers to the absence of roads which have been improved and maintained by mechanical means to ensure relatively regular and continuous use. A ‘way’ maintained solely by the passage of vehicles does not constitute a road.”

Field Office **BFO** **Lease Sale Month and Year:** **Aug-11**

Parcel No.	More than 5000 of roadless land (yes/no)	Imprint of man's work substantially unnoticeable (yes/no)	Outstanding opportunity for solitude or primitive recreation (yes/no)	Contains natural features of scientific, educational, scenic, or historical value (yes/no)	In Citizen Proposed Wilderness Area (yes/no. If yes but dropped during RMP process, state why)	Field office Notes or Explanations
Wy-1108-011	N	N	N	N	N	
WY-1108-012	N	N	N	N	N	
WY-1108-013	N	N	N	N	N	
WY-1108-014	N	N	N	N	N	
WY-1108-015	N	N	N	N	N	
WY-1108-016	N	N	N	N	N	
WY-1108-017	N	N	N	N	N	
WY-1108-018	N	N	N	N	N	
WY-1108-019	N	N	N	N	N	
WY-1108-020	N	N	N	N	N	
WY-1108-021	N	N	N	N	N	
WY-1108-024	N	N	N	N	N	
WY-1108-025	N	N	N	N	N	
WY-1108-026	N	N	N	N	N	

Sage-grouse Screen for Oil & Gas Lease Parcels

Field Office: BFO

Lease Sale Month and Year: Aug 2011

Parcel #	Core Area (Yes/No)	Habitat (Yes/No)	11 sq. mi. Manageable fed. land (Yes/No)	Drainage (Yes/No)	Defer Parcel (Yes/No)	Lease w/Lease Notice #3 (Yes/No)
Wy-1108-011	Yes	Yes	No		Yes	yes, if not deferred
WY-1108-012	No	Yes	No		No	Yes
WY-1108-013	No	Yes	No		No	Yes
WY-1108-014	connectivity	Yes	No		Yes	yes, if not deferred
WY-1108-015	No	Yes	No		No	Yes
WY-1108-016	No	Yes	No		No	No
WY-1108-017	No	Yes	No		No	Yes
WY-1108-018	No	Yes	No		No	Yes
WY-1108-019	No	Yes	No		No	Yes
WY-1108-020	No	Yes	No		No	Yes
WY-1108-021	No	Yes	No		No	Yes
WY-1108-024	No	Yes	No		No	No
WY-1108-025	No	Yes	No		No	No
WY-1108-026	No	Yes	No		No	Yes

Casper Field Office

Sage Grouse/Wildlife Screen

Field Office Review of Oil and Gas Competitive Lease Sale - August 2011

Preliminary List and Review

Field Office: Casper Field Office Sale Date (month and year): August 2011

Preliminary Number	Field Checked	Parcel appears isolated Y=Yes, N=No	Remarks (any other new information that should be considered for possible parcel deferral)	Parcel should still be offered Y or N	If parcel should now be deferred, when should it be deferred until?
10	N		Converse County;	Y	
22	N		Converse County;	Y	
23	N		Converse County; SGN; ADD T&E Stip 4 SG;	Y	
27	N		Converse County;	Y	
28	N		Converse County;	Y	
29	N		Converse County;	Y	
30	N		Converse County; SGN; ADD T&E Stip 4 SG;	Y	
31	N		Converse County; SGN; ADD T&E Stip 4 SG;	Y	
32	N	N	Converse County; SGCA; SGL; SGN; ADD T&E Stip 4 SG;	Y	
33	N		Converse County;	Y	
34	N		Converse County; SGN; ADD T&E Stip 4 SG; NSO Entire Lease (Bald Eagle);	Y	
35	N		Converse County;	Y	
36	N		Converse County; SGN; ADD T&E 4 SG;	Y	
37	N		Converse County; SGN; ADD T&E 4 SG;	Y	
38	N	N	Converse County; SGCA; SGL; SGN; ADD T&E Stip 4 SG; sacred Native American site;	NO LEASE in-part deletion; LEASE in -part - failed criteria #3 for SG	
39	N	N	Converse County; SGCA; SGN; ADD T&E Stip 4	Y	

Preliminary Number	Field Checked	Parcel appears isolated Y=Yes, N=No	Remarks (any other new information that should be considered for possible parcel deferral)	Parcel should still be offered Y or N	If parcel should now be deferred, when should it be deferred until?
			SG;		
40	N		Converse County;SGN; ADD T&E Stip 4 SG;	Y	
41	Y	N	Converse County; SGCA;	Y	
42	Y	N	Converse County; SGCA;	Y	
43	Y		Converse County; SGCA;	Y	
44	Y	N	Converse County; SGCA;	Y	
45	Y		Converse County;	Y	
46	Y		Converse County; SGCA;	Y	
47	N		Converse County;	Y	
48	N		Converse County;	Y	
49	N		Converse County;	Y	
50	N		Converse County;	Y	
51	N		Converse County;	Y	
52	N		Converse County;	Y	
53	Y		Converse County;	Y	
54	N		Natrona County;	Y	
55	N		Natrona County;	Y	

Field Office Review of Oil and Gas Competitive Lease Sale - August 2011

Preliminary List and Review for Wilderness Characteristics

Prelim No.	More than 5000 of roadless land (yes/no)	Imprint of man's work substantially unnoticeable (yes/no)	Outstanding opportunity for solitude or primitive recreation (yes/no)	Contains natural features of scientific, educational, scenic, or historical value (yes/no)	In Citizen Proposed Wilderness Area (yes/no). If yes but dropped during RMP process, state why)

Prelim No.	More than 5000 of roadless land (yes/no)	Imprint of man's work substantially unnoticeable (yes/no)	Outstanding opportunity for solitude or primitive recreation (yes/no)	Contains natural features of scientific, educational, scenic, or historical value (yes/no)	In Citizen Proposed Wilderness Area (yes/no). If yes but dropped during RMP process, state why)
10	No	No	No	No	
22	No	No	No	No	
23	No	No	No	No	
27	No	No	No	No	
28	No	No	No	No	
29	No	No	No	No	
30	No	No	No	No	
31	No	No	No	No	
32	No	No	No	No	
33	No	No	No	No	
34	Yes	No; road present.	No	No	
35	No	No	No	No	
36	No	No	No	No	
37	No	No	No	No	
38	Yes	No; roads present, adjacent oil field (Derrick Draw).	No	No	
39	No	No	No	No	
40	Yes	No; roads present; adjacent wells.	No	No	
41	Yes	No; roads present.	No	No	
42	Yes	No; roads present; could see wind turbines in the distance.	No	No	

Prelim No.	More than 5000 of roadless land (yes/no)	Imprint of man's work substantially unnoticeable (yes/no)	Outstanding opportunity for solitude or primitive recreation (yes/no)	Contains natural features of scientific, educational, scenic, or historical value (yes/no)	In Citizen Proposed Wilderness Area (yes/no). If yes but dropped during RMP process, state why)
43	Yes	No; roads, fences, range improvements present; wind turbines in the distance.	No	No	
44	Yes	No; roads, fences, present; wind turbines in the distance.	No	No	
45	Yes	No; roads, oil development, and met tower present.	No	No	
46	Yes	No; roads, oil development and fences present.	No	No	
47	Yes	No; roads present.	No	No	
48	No	No	No	No	
49	No	No	No	No	
50	No	No	No	No	
51	No	No	No	No	
52	No	No	No	No	
53	No	No	No	No	
54	No	No	No	No	
55	No	No	No	No	

Newcastle Field Office

Wilderness Review Checklist for Oil and Gas Lease Parcels

Sec. 603 (43 USC 1782). The Wilderness Act states:

“A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.”

“The word ‘roadless’ refers to the absence of roads which have been improved and maintained by mechanical means to ensure relatively regular and continuous use. A ‘way’ maintained solely by the passage of vehicles does not constitute a road.”

Lease Parcel	More than 5000 of roadless land (yes/no)	Imprint of man's work substantially unnoticeable (yes/no)	Outstanding opportunity for solitude or primitive recreation (yes/no)	Contains natural features of scientific, educational, scenic, or historical value (yes/no)	In Citizen Proposed Wilderness Area (yes/no. If yes but dropped during RMP process, state why)
WY-1108-001	NO	NO	NO	NO	NO
WY-1108-002	NO	NO	NO	NO	NO
WY-1108-003	NO	NO	NO	NO	NO
WY-1108-004	NO	NO	NO	NO	NO
WY-1108-005	NO	NO	NO	NO	NO
WY-1108-006	NO	NO	NO	NO	NO
WY-1108-007	NO	NO	NO	NO	NO
WY-1108-008	NO	NO	NO	NO	NO
WY-1108-009	NO	NO	NO	NO	NO

Sage-grouse Screen for Oil & Gas Lease Parcels

Field Office NFO

Lease Sale Month and Year: August-2011

Parcel #	Core Area (Yes/No)	Habitat (Yes/No)	11 sq. mi. Manageable fed. land (Yes/No)	Drainage (Yes/No)	Defer Parcel (Yes/No)	Lease w/Lease Notice #3 (Yes/No)
WY-1108-001	No	No	N/A	N/A	N/A	N/A
WY-1108-002	No	No	N/A	N/A	N/A	N/A
WY-1108-003	No	No	N/A	N/A	N/A	N/A

Parcel #	Core Area (Yes/No)	Habitat (Yes/No)	11 sq. mi. Manageable fed. land (Yes/No)	Drainage (Yes/No)	Defer Parcel (Yes/No)	Lease w/Lease Notice #3 (Yes/No)
WY-1108-004	No	No	N/A	N/A	N/A	N/A
WY-1108-005	No	No	N/A	N/A	N/A	N/A
WY-1108-006	No	No	N/A	N/A	N/A	N/A
WY-1108-007	No	No	N/A	N/A	N/A	N/A
WY-1108-008	Connectivity	Yes	No	N/A	No	Yes
WY-1108-009	No	Yes	No	N/A	No	No

APPENDIX C

Lease Parcel List Alternative B Proposed Action

WY-1108-001	40.000 Acres	WY-1108-029	560.000 Acres
WY-1108-002	197.300 Acres	WY-1108-030	2111.570 Acres
WY-1108-003	160.000 Acres	WY-1108-031	346.230 Acres
WY-1108-004	160.000 Acres	WY-1108-033	196.580 Acres
WY-1108-005	592.700 Acres	WY-1108-034	196.070 Acres
WY-1108-006	200.000 Acres	WY-1108-035	240.000 Acres
WY-1108-007	160.000 Acres	WY-1108-036	1840.000 Acres
WY-1108-009	40.290 Acres	WY-1108-037	560.000 Acres
WY-1108-010	560.000 Acres	WY-1108-038	418.700 Acres
WY-1108-012	480.000 Acres	WY-1108-039	480.000 Acres
WY-1108-013	521.840 Acres	WY-1108-041	751.640 Acres
WY-1108-015	2367.370 Acres	WY-1108-042	1914.400 Acres
WY-1108-016	2370.480 Acres	WY-1108-043	2320.000 Acres
WY-1108-017	2054.630 Acres	WY-1108-044	636.920 Acres
WY-1108-018	2164.270 Acres	WY-1108-045	2162.980 Acres
WY-1108-019	2064.860 Acres	WY-1108-046	2518.160 Acres
WY-1108-020	1423.180 Acres	WY-1108-047	1720.000 Acres
WY-1108-021	660.920 Acres	WY-1108-048	480.000 Acres
WY-1108-022	282.390 Acres	WY-1108-049	920.000 Acres
WY-1108-023	1800.760 Acres	WY-1108-050	1960.000 Acres
WY-1108-024	2191.710 Acres	WY-1108-051	480.000 Acres
WY-1108-025	1992.540 Acres	WY-1108-052	269.560 Acres
WY-1108-026	2029.460 Acres	WY-1108-053	638.600 Acres
WY-1108-027	204.000 Acres	WY-1108-054	80.000 Acres
WY-1108-028	461.950 Acres	WY-1108-055	40.000 Acres

APPENDIX D

Lease Parcel List Alternative C Offer All Parcels for Sale

WY-1108-001	40.000 Acres	WY-1108-029	560.000 Acres
WY-1108-002	197.300 Acres	WY-1108-030	2111.570 Acres
WY-1108-003	160.000 Acres	WY-1108-031	346.230 Acres
WY-1108-004	160.000 Acres	WY-1108-032	943.070 Acres
WY-1108-005	592.700 Acres	WY-1108-033	196.580 Acres
WY-1108-006	200.000 Acres	WY-1108-034	196.070 Acres
WY-1108-007	160.000 Acres	WY-1108-035	240.000 Acres
WY-1108-008	960.000 Acres	WY-1108-036	1840.000 Acres
WY-1108-009	40.290 Acres	WY-1108-037	560.000 Acres
WY-1108-010	560.000 Acres	WY-1108-038	418.700 Acres
WY-1108-011	606.970 Acres	WY-1108-039	480.000 Acres
WY-1108-012	480.000 Acres	WY-1108-040	1640.000 Acres
WY-1108-013	521.840 Acres	WY-1108-041	751.640 Acres
WY-1108-014	874.070 Acres	WY-1108-042	1914.400 Acres
WY-1108-015	2367.370 Acres	WY-1108-043	2320.000 Acres
WY-1108-016	2370.480 Acres	WY-1108-044	636.920 Acres
WY-1108-017	2054.630 Acres	WY-1108-045	2162.980 Acres
WY-1108-018	2164.270 Acres	WY-1108-046	2518.160 Acres
WY-1108-019	2064.860 Acres	WY-1108-047	1720.000 Acres
WY-1108-020	1423.180 Acres	WY-1108-048	480.000 Acres
WY-1108-021	660.920 Acres	WY-1108-049	920.000 Acres
WY-1108-022	282.390 Acres	WY-1108-050	1960.000 Acres
WY-1108-023	1800.760 Acres	WY-1108-051	480.000 Acres
WY-1108-024	2191.710 Acres	WY-1108-052	269.560 Acres
WY-1108-025	1992.540 Acres	WY-1108-053	638.600 Acres
WY-1108-026	2029.460 Acres	WY-1108-054	80.000 Acres
WY-1108-027	204.000 Acres	WY-1108-055	40.000 Acres
WY-1108-028	461.950 Acres		

APPENDIX E

Buffalo Field Office Parcel List with Stipulations

Deleted stipulations are signified in purple and strikeout.
Inserted stipulations are signified in red.
Deferrals have a heading in All Caps, red and underlined.

WY-1108-011 DEFERRED DUE TO SAGE GROUSE CORE AREA BUFFALO RMP

WY-1108-011 606.970 Acres

T.0560N, R.0700W, 06th PM, WY

Sec. 001 LOTS 5-16;

001 SW;

035 LOTS 2;

Campbell County

Buffalo FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

TLS (1) Mar 15 to Jul 15; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting nesting Greater sage-grouse.

~~TLS (1) Feb 1 to Jul 31; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting nesting Raptors.~~

CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting *Centrocercus urophasianus* (Greater Sage-grouse).

WY-1108-012 480.000 Acres

T.0560N, R.0700W, 06th PM, WY

Sec. 002 LOTS 13-20;

002 SE;

Campbell County

Buffalo FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

TLS (1) Mar 15 to Jul 15; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting nesting Greater sage-grouse.

CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting *Centrocercus urophasianus* (Greater Sage-grouse).

WY-1108-013 521.840 Acres

T.0560N, R.0700W, 06th PM, WY

Sec. 007 LOTS 6-16;

007 SWSE;

009 NW;

Campbell County

Buffalo FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

TLS (1) Mar 15 to Jul 15; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting nesting Greater sage-grouse.

CSU (1) Surface occupancy or use within 1/4 mile of a Greater sage-grouse strutting/dancing ground will be restricted or prohibited unless the operator and surface managing agency arrive at an acceptable plan for mitigation of anticipated impacts; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting Greater sage-grouse breeding habitat.

CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its

conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Buffalo RMP map; (3) protecting *Haliaeetus leucocephalus* (Bald eagle), *Centrocercus urophasianus* (Greater Sage-grouse).

WY-1108-014 DEFERRED DUE TO SAGE GROUSE CONNECTIVITY BUFFALO RMP

WY-1108-014 874.070 Acres

T.0560N, R.0700W, 06th PM, WY

Sec. 013 NE;
 014 LOTS 2,3;
 014 SENW;
 017 SW;
 018 LOTS 5-10;
 018 NE,E2NW,E2SE;

Campbell County

Buffalo FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

TLS (1) Mar 15 to Jul 15; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting nesting Greater sage-grouse.

CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Buffalo RMP map; (3) protecting *Haliaeetus leucocephalus* (Bald eagle), *Centrocercus urophasianus* (Greater Sage-grouse).

WY-1108-015 2367.370 Acres

T.0570N, R.0700W, 06th PM, WY

Sec. 005 LOTS 5-8;
 005 S2N2,E2SW,SE;
 006 LOTS 8-10;
 006 SENE;
 008 N2NE,NENW;
 014 W2,W2SE,SESE;
 015 LOTS 1-4;
 015 N2,E2SE;
 016 LOTS 1-3;
 016 N2,W2SW;
 017 NE;

Campbell County

Buffalo FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

~~TLS (1) Mar 15 to Jul 15; (2) as mapped on the Buffalo Field
Office GIS database; (3) protecting nesting Greater sage grouse.~~

~~TLS (1) Feb 1 to Jul 31; (2) as mapped on the Buffalo Field
Office GIS database; (3) protecting nesting Raptors.~~

CSU (1) The lease area may now or hereafter contain plants,
animals, or their habitats determined to be threatened, endangered,
or other special status species. BLM may recommend modifications
to exploration and development proposals to further its
conservation and management objective to avoid BLM-approved
activity that will contribute to a need to list such a species or
their habitat. BLM may require modifications to or disapprove
proposed activity that is likely to result in jeopardy to the
continued existence of a proposed or listed threatened or
endangered species or result in the destruction or adverse
modification of a designated or proposed critical habitat. BLM
will not approve any ground-disturbing activity that may affect any
such species or critical habitat until it completes its obligations
under applicable requirements of the Endangered Species Act as
amended, 16 U.S.C. § 1531 et seq., including completion of any
required procedure for conference or consultation; (2) as mapped on
the Buffalo RMP map; (3) protecting *Haliaeetus leucocephalus* (Bald
eagle).

WY-1108-016 2370.480 Acres

T.0570N, R.0700W, 06th PM, WY

Sec. 018 LOTS 7,8;
 018 E2SW,SE;
 019 LOTS 5,8;
 019 N2NE,SENE,NENW,E2SE;
 020 ALL;
 021 LOTS 1;

021 NENW,W2SW,SESW;
022 LOTS 1,2,4;
022 E2E2,SESW;
023 ALL;

Campbell County

Buffalo FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Buffalo RMP map; (3) protecting *Haliaeetus leucocephalus* (Bald eagle); *Cynomys ludovicianus* (Black-tailed prairie dog).

WY-1108-017 2054.630 Acres

T.0570N, R.0700W, 06th PM, WY

Sec. 027 S2NW,N2SW,W2SE;
028 N2,N2SW,SE;
029 NWNE,NENW,S2;
030 W2NE,SE;
031 LOTS 5-8;
031 NWNE,E2NW,NESW;
033 NE,N2SE,SESE;
034 NWNE;

Campbell County

Buffalo FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

~~TLS (1) Mar 15 to Jul 15; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting nesting Greater sage grouse.~~

CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered,

or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Buffalo RMP map; (3) protecting *Cynomys ludovicianus* (Black-tailed prairie dog).

WY-1108-018 2164.270 Acres

T.0580N, R.0700W, 06th PM, WY

Sec. 019 LOTS 9,10;
 020 LOTS 9-12;
 021 LOTS 9-12;
 022 LOTS 9-12;
 023 LOTS 9-12;
 024 LOTS 12;
 025 W2NW,NWSW;
 026 ALL;
 027 ALL;

Campbell County

Buffalo FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

TL5 (1) Mar 15 to Jul 15; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting nesting Greater sage-grouse.

~~TL5 (1) Feb 1 to Jul 31; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting nesting Raptors.~~

CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations

under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Buffalo RMP map; (3) protecting *Haliaeetus leucocephalus* (Bald eagle), *Centrocercus urophasianus* (Greater Sage-grouse).

WY-1108-019 2064.860 Acres

T.0580N, R.0700W, 06th PM, WY

Sec. 028 ALL;
 029 ALL;
 030 LOTS 6-8;
 030 E2, SENW, E2SW;
 031 LOTS 9-11, 13;
 031 E2SE;

Campbell County

Buffalo FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

TLS (1) Mar 1 to Jun 30; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting nesting Sharp-tailed grouse.

TLS (1) Mar 15 to Jul 15; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting nesting Greater sage-grouse.

~~TLS (1) Feb 1 to Jul 31; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting nesting Raptors.~~

CSU (1) Surface occupancy or use within 1/4 mile of a Sharp-tailed grouse strutting/dancing ground will be restricted or prohibited unless the operator and surface managing agency arrive at an acceptable plan for mitigation of anticipated impacts; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting Sharp-tailed grouse breeding habitat.

~~CSU (1) Surface occupancy or use within 1/4 mile of a Greater sage grouse strutting/dancing ground will be restricted or prohibited unless the operator and surface managing agency arrive at an acceptable plan for mitigation of anticipated impacts; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting Greater sage grouse breeding habitat.~~

CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations

under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Buffalo RMP map; (3) protecting *Haliaeetus leucocephalus* (Bald eagle), *Centrocercus urophasianus* (Greater Sage-grouse).

WY-1108-020 1423.180 Acres

T.0580N, R.0700W, 06th PM, WY

Sec. 032 LOTS 1,2,4-6;

032 W2NE,S2;

033 LOTS 1-8;

033 NWSW,S2S2;

034 LOTS 1-8;

034 NE,NENW;

Campbell County

Buffalo FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

TLS (1) Mar 1 to Jun 30; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting nesting Sharp-tailed grouse.

TLS (1) Mar 15 to Jul 15; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting nesting Greater sage-grouse.

~~TLS (1) Feb 1 to Jul 31; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting nesting Raptors.~~

~~CSU (1) Surface occupancy or use within 1/4 mile of a Greater sage grouse strutting/dancing ground will be restricted or prohibited unless the operator and surface managing agency arrive at an acceptable plan for mitigation of anticipated impacts; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting Greater sage-grouse breeding habitat.~~

CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Buffalo RMP map; (3) protecting *Centrocercus urophasianus* (Greater Sage-grouse).

WY-1108-021 660.920 Acres
T.0580N, R.0700W, 06th PM, WY
Sec. 035 LOTS 1-8;
 035 NW,NESW;
 036 LOTS 2-9;
 036 SENE;

Campbell County

Buffalo FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

TLS (1) Mar 15 to Jul 15; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting nesting Greater sage-grouse.

CSU (1) Surface occupancy or use within 1/4 mile of a Greater sage-grouse strutting/dancing ground will be restricted or prohibited unless the operator and surface managing agency arrive at an acceptable plan for mitigation of anticipated impacts; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting Greater sage-grouse breeding habitat.

CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Buffalo RMP map; (3) protecting *Centrocercus urophasianus* (Greater Sage-grouse).

WY-1108-024 2191.710 Acres
T.0570N, R.0710W, 06th PM, WY
Sec. 001 LOTS 7;
 001 S2SE;
 002 SW,N2SE,SWSE;
 003 LOTS 5-8;
 003 S2N2;
 004 LOTS 5-8;
 004 S2N2,S2;
 005 LOTS 5,6;
 005 S2NE;

009 E2;
010 SWNE,W2;

Campbell County

Buffalo FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

~~TLS (1) Feb 1 to Jul 31; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting nesting Raptors.~~

CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Buffalo RMP map; (3) protecting *Haliaeetus leucocephalus* (Bald eagle), *Cynomys ludovicianus* (Black-tailed prairie dog).

WY-1108-025 1992.540 Acres

T.0570N, R.0710W, 06th PM, WY

Sec. 011 LOTS 2-4;
011 SWNE,SW,NWSE;
013 LOTS 1,3-5;
013 E2;
015 NW;
016 LOTS 1,2;
016 N2;
017 SW;
020 LOTS 1;
020 NENE,NW,S2SE;
021 LOTS 1,2;
021 S2SW;
022 LOTS 1;

Campbell County

Buffalo FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

~~TLS (1) Feb 1 to Jul 31; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting nesting Raptors.~~

CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Buffalo RMP map; (3) protecting *Haliaeetus leucocephalus* (Bald eagle).

WY-1108-026 2029.460 Acres
T.0570N, R.0710W, 06th PM, WY
Sec. 023 LOTS 7,8;
 023 SWSW;
 024 NENE,W2E2,SESW,SESE;
 025 LOTS 1;
 025 N2NE,NENW;
 026 W2W2,E2SE;
 027 S2;
 031 LOTS 5,6;
 031 NE,E2NW,N2SE,SWSE;
 034 N2NW,SWNW,N2SW;
 036 N2;

Campbell County

Buffalo FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

TLS (1) Mar 15 to Jul 15; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting nesting Greater sage-grouse.

~~TLS (1) Mar 1 to Jun 30; (2) as mapped on the Buffalo RMP map; (3) protecting nesting Sharp-tailed grouse.~~

~~TLS (1) Feb 1 to Jul 31; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting nesting Raptors.~~

CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its

conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Buffalo RMP map; (3) protecting *Haliaeetus leucocephalus* (Bald eagle), *Centrocercus urophasianus* (Greater Sage-grouse), *Cynomys ludovicianus* (Black-tailed prairie dog).

APPENDIX F

Casper Field Office Parcel List with Stipulations

Deleted stipulations are signified in purple and ~~strikeout~~.
Inserted stipulations are signified in red.
Deferrals have a heading in All Caps, red and underlined.

WY-1108-010 560.000 Acres
T.0400N, R.0690W, 06th PM, WY
Sec. 011 SWSE,E2SE;
 028 N2;
 029 N2SE,SWSE;

Converse County

Casper FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

TLS (1) Feb 1 to Jul 31; (2) as mapped on the Casper Field Office GIS database; (3) protecting nesting Raptors.

NSO (1) as mapped on the Casper Field Office GIS database (2) protecting the Bald Eagle Nest.

CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Casper Field Office GIS database; (3) protecting *Cynomys ludovicianus* (Black-tailed prairie dog).

WY-1108-022 282.390 Acres
T.0370N, R.0710W, 06th PM, WY
Sec. 002 LOTS 1-4;
 002 SWNW,W2SW;

Converse County

Casper FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Casper Field Office GIS database; (3) protecting *Penstemon haydenii* (Blowout penstemon).

WY-1108-023 1800.760 Acres

T.0370N, R.0710W, 06th PM, WY

Sec. 004 SW;
005 LOTS 1-4;
005 S2N2;
006 LOTS 3-7;
007 SESW;
008 SE;
009 S2;
011 SENE,NESE;
018 NWNE;
019 LOTS 1-4;
019 SENW,E2SW;
020 NE;
031 SWSE;

Converse County

Casper FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

TLS (1) Mar 15 to Jul 15; (2) as mapped on the Casper Field Office GIS database; (3) protecting nesting Greater sage-grouse.

TLS (1) Feb 1 to Jul 31; (2) as mapped on the Casper Field Office GIS database; (3) protecting nesting Raptors.

CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Casper Field Office GIS database; (3) protecting *Centrocercus urophasianus* (Greater Sage-grouse).

WY-1108-027 204.000 Acres
T.0340N, R.0720W, 06th PM, WY
Sec. 006 LOTS 1,7;
 006 SENE,E2SE;

Converse County

Casper FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Casper Field Office GIS database; (3) protecting *Penstemon haydenii* (Blowout penstemon).

WY-1108-028 461.950 Acres
T.0340N, R.0720W, 06th PM, WY

Sec. 007 LOTS 1-4;
007 E2SW,SE;

Converse County

Casper FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Casper Field Office GIS database; (3) protecting *Penstemon haydenii* (Blowout penstemon).

WY-1108-029 560.000 Acres

T.0340N, R.0720W, 06th PM, WY

Sec. 008 NE,E2NW,S2;

Converse County

Casper FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

WY-1108-030 2111.570 Acres

T.0360N, R.0740W, 06th PM, WY

Sec. 006 LOTS 8,9,14-23;

007 LOTS 5-10,13-16;

018 LOTS 5-12;

019 LOTS 5-20;

030 LOTS 7-10,15-18;

Converse County

Casper FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

TLS (1) Mar 15 to Jul 15; (2) as mapped on the Casper Field Office GIS database; (3) protecting nesting Greater sage-grouse.

TLS (1) Feb 1 to Jul 31; (2) as mapped on the Casper Field Office GIS database; (3) protecting nesting Raptors.

CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Casper Field Office GIS database; (3) protecting *Spiranthes diluvialis* (Ute ladies'-tresses); *Centrocercus urophasianus* (Greater Sage-grouse).

WY-1108-031 346.230 Acres

T.0380N, R.0740W, 06th PM, WY

Sec. 030 LOTS 5,8,9,12,16,17;

031 LOTS 7,8,20;

Converse County

Casper FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

TLS (1) Mar 15 to Jul 15; (2) as mapped on the Casper Field Office GIS database; (3) protecting nesting Greater sage-grouse.

TLS (1) Feb 1 to Jul 31; (2) as mapped on the Casper Field Office GIS database; (3) protecting nesting Raptors.

CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or

endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Casper Field Office GIS database; (3) protecting *Spiranthes diluvialis* (Ute ladies'-tresses); *Centrocercus urophasianus* (Greater Sage-grouse).

WY-1108-032 943.070 Acres

T.0350N, R.0750W, 06th PM, WY

Sec. 001 LOTS 5-20;

 005 LOTS 13-20;

Converse County

Casper FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

TLS (1) Mar 15 to Jul 15; (2) as mapped on the Casper Field Office GIS database; (3) protecting nesting Greater sage-grouse.

TLS (1) Feb 1 to Jul 31; (2) as mapped on the Casper Field Office GIS database; (3) protecting nesting Raptors.

CSU (1) Surface occupancy or use within 1/4 mile of a Greater sage-grouse strutting/dancing ground will be restricted or prohibited unless the operator and surface managing agency arrive at an acceptable plan for mitigation of anticipated impacts; (2) as mapped on the Casper Field Office GIS database; (3) protecting Greater sage-grouse breeding habitat.

CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Casper Field Office GIS database; (3) protecting *Centrocercus urophasianus* (Greater Sage-grouse).

NOTE: This Parcel is located in a Sage-grouse Core Area.

WY-1108-033 196.580 Acres
T.0360N, R.0750W, 06th PM, WY
Sec. 025 LOTS 5;
 026 LOTS 8,9,13,15;

Converse County

Casper FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

WY-1108-034 196.070 Acres
T.0370N, R.0750W, 06th PM, WY
Sec. 007 LOTS 13,14,17,19,20;

Converse County

Casper FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

TLS (1) Mar 15 to Jul 15; (2) as mapped on the Casper Field Office GIS database; (3) protecting nesting Greater sage-grouse.

NSO (1) as mapped on the Casper Field Office GIS database (2) protecting the North Fork Cheyenne River Roost.

CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Casper Field Office GIS database; (3) protecting *Centrocercus urophasianus* (Greater Sage-grouse).

WY-1108-035 240.000 Acres
T.0380N, R.0750W, 06th PM, WY
Sec. 012 NW;
 013 N2NE;

Converse County
Casper FO
Formerly Lease No.
Stipulations:
Lease Notice No. 1
Lease Notice No. 2
Lease Notice No. 3
Special Lease Stipulation
TLS (1) Feb 1 to Jul 31; (2) as mapped on the Casper Field Office
GIS database; (3) protecting nesting Raptors.

WY-1108-036 1840.000 Acres
T.0380N, R.0750W, 06th PM, WY
Sec. 021 W2W2;
 022 W2;
 027 ALL;
 028 NE,N2NW,S2;
 029 N2NE,SENW,NWSW;

Converse County
Casper FO
Formerly Lease No.
Stipulations:
Lease Notice No. 1
Lease Notice No. 2
Lease Notice No. 3
Special Lease Stipulation
TLS (1) Mar 15 to Jul 15; (2) as mapped on the Casper Field
Office GIS database; (3) protecting nesting Greater sage-grouse.
TLS (1) Feb 1 to Jul 31; (2) as mapped on the Casper Field Office
GIS database; (3) protecting nesting Raptors.
CSU (1) The lease area may now or hereafter contain plants,
animals, or their habitats determined to be threatened, endangered,
or other special status species. BLM may recommend modifications
to exploration and development proposals to further its
conservation and management objective to avoid BLM-approved
activity that will contribute to a need to list such a species or
their habitat. BLM may require modifications to or disapprove
proposed activity that is likely to result in jeopardy to the
continued existence of a proposed or listed threatened or
endangered species or result in the destruction or adverse
modification of a designated or proposed critical habitat. BLM
will not approve any ground-disturbing activity that may affect any
such species or critical habitat until it completes its obligations
under applicable requirements of the Endangered Species Act as
amended, 16 U.S.C. § 1531 et seq., including completion of any
required procedure for conference or consultation; (2) as mapped on
the Casper Field Office GIS database; (3) protecting *Spiranthes
diluvialis* (Ute ladies'-tresses); *Centrocercus urophasianus*
(Greater Sage-grouse).

WY-1108-037 560.000 Acres
T.0380N, R.0750W, 06th PM, WY

Sec. 033 W2,SE;
034 W2NW;

Converse County

Casper FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

TLS (1) Mar 15 to Jul 15; (2) as mapped on the Casper Field Office GIS database; (3) protecting nesting Greater sage-grouse.

~~CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Casper Field Office GIS database; (3) protecting Centrocercus urophasianus (Greater Sage-grouse).~~

WY-1108-038 481.070 Acres

T.0350N, R.0760W, 06th PM, WY

Sec. 001 LOTS 1-4;

001 S2N2,SE;

~~003 LOTS 1-4;~~

~~003 S2N2,SW;~~

Converse County

Casper FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

TLS (1) Mar 15 to Jul 15; (2) as mapped on the Casper Field Office GIS database; (3) protecting nesting Greater sage-grouse.

TLS (1) Feb 1 to Jul 31; (2) as mapped on the Casper Field Office GIS database; (3) protecting nesting Raptors.

CSU (1) Surface occupancy or use within 1/4 mile of a Greater sage-grouse strutting/dancing ground will be restricted or prohibited unless the operator and surface managing agency arrive at an acceptable plan for mitigation of anticipated impacts; (2) as

mapped on the Casper Field Office GIS database; (3) protecting Greater sage-grouse breeding habitat.

CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Casper Field Office GIS database; (3) protecting *Centrocercus urophasianus* (Greater Sage-grouse).

NOTE: This Parcel is located in a Sage-grouse Core Area.

WY-1108-039 480.000 Acres

T.0360N, R.0760W, 06th PM, WY

Sec. 021 N2;

022 SW;

Converse County

Casper FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

TLS (1) Mar 15 to Jul 15; (2) as mapped on the Casper Field Office GIS database; (3) protecting nesting Greater sage-grouse.

CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on

the Casper Field Office GIS database; (3) protecting *Centrocercus urophasianus* (Greater Sage-grouse).

NOTE: This Parcel is located in a Sage-grouse Core Area.

WY-1108-040 1640.000 Acres
T.0370N, R.0760W, 06th PM, WY
Sec. 001 E2SW;
 010 SENE,W2E2,SWSW,SESE;
 011 ALL;
 015 ALL;

Converse County
Casper FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

TLS (1) Mar 15 to Jul 15; (2) as mapped on the Casper Field Office GIS database; (3) protecting nesting Greater sage-grouse.

CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Casper Field Office GIS database; (3) protecting *Centrocercus urophasianus* (Greater Sage-grouse).

WY-1108-041 751.640 Acres
T.0370N, R.0760W, 06th PM, WY
Sec. 006 LOTS 3;
 006 SENW,E2SW,SE;
 007 LOTS 2-4;
 007 E2W2,SE;

Converse County
Casper FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

~~TLS (1) Mar 15 to Jul 15; (2) as mapped on the Casper Field Office GIS database; (3) protecting nesting Greater sage-grouse.~~

TLS (1) Feb 1 to Jul 31; (2) as mapped on the Casper Field Office GIS database; (3) protecting nesting Raptors.

NOTE: This Parcel is located in a Sage-grouse Core Area.

WY-1108-042 1914.400 Acres

T.0370N, R.0760W, 06th PM, WY

Sec. 017 W2;
019 LOTS 1-4;
019 E2,E2W2;
020 ALL;
021 W2;

Converse County

Casper FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

~~TLS (1) Mar 15 to Jul 15; (2) as mapped on the Casper Field Office GIS database; (3) protecting nesting Greater sage-grouse.~~

TLS (1) Feb 1 to Jul 31; (2) as mapped on the Casper Field Office GIS database; (3) protecting nesting Raptors.

NOTE: This Parcel is located in a Sage-grouse Core Area.

WY-1108-043 2320.000 Acres

T.0370N, R.0760W, 06th PM, WY

Sec. 024 S2;
027 SW;
028 ALL;
029 ALL;
033 NE;
034 N2;
035 W2SW;

Converse County

Casper FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

TLS (1) Feb 1 to Jul 31; (2) as mapped on the Casper Field Office GIS database; (3) protecting nesting Raptors.

CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved

activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Casper Field Office GIS database; (3) protecting Penstemon haydenii (Blowout penstemon).

NOTE: This Parcel is located in a Sage-grouse Core Area.

WY-1108-044 636.920 Acres
T.0370N, R.0760W, 06th PM, WY
Sec. 030 LOTS 1-4;
 030 E2,E2W2;

Converse County

Casper FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

~~TLS (1) Mar 15 to Jul 15; (2) as mapped on the Casper Field Office GIS database; (3) protecting nesting Greater sage grouse.~~

TLS (1) Feb 1 to Jul 31; (2) as mapped on the Casper Field Office GIS database; (3) protecting nesting Raptors.

NOTE: This Parcel is located in a Sage-grouse Core Area.

WY-1108-045 2162.980 Acres
T.0380N, R.0760W, 06th PM, WY
Sec. 005 LOTS 1-3;
 005 S2N2,S2;
 007 LOTS 1-4;
 007 E2,E2W2;
 009 NE,SW;
 018 LOTS 1-4;
 018 E2,E2W2;

Converse County

Casper FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

WY-1108-046 2518.160 Acres

T.0380N, R.0760W, 06th PM, WY

Sec. 019 LOTS 1-4;
 019 E2,E2W2;
 029 W2;
 030 LOTS 1-4;
 030 E2,E2W2;
 031 LOTS 1-4;
 031 E2,E2W2;
 032 W2;

Converse County

Casper FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

NOTE: This Parcel is located in a Sage-grouse Core Area.

WY-1108-047 1720.000 Acres

T.0380N, R.0760W, 06th PM, WY

Sec. 021 NE,W2NW,SE,SW,S2;
 027 S2;
 028 ALL;
 034 NW;

Converse County

Casper FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

TLS (1) Feb 1 to Jul 31; (2) as mapped on the Casper Field Office GIS database; (3) protecting nesting Raptors.

WY-1108-048 480.000 Acres

T.0390N, R.0760W, 06th PM, WY

Sec. 007 SE;
 008 N2;

Converse County

Casper FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

WY-1108-049 920.000 Acres

T.0390N, R.0760W, 06th PM, WY

Sec. 011 S2SE;
012 SWSW;
013 W2W2;
023 ALL;

Converse County

Casper FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

TLS (1) Feb 1 to Jul 31; (2) as mapped on the Casper Field Office GIS database; (3) protecting nesting Raptors.

CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Casper Field Office GIS database; (3) protecting *Cynomys ludovicianus* (Black-tailed prairie dog); *Spiranthes diluvialis* (Ute ladies'-tresses).

WY-1108-050 1960.000 Acres

T.0390N, R.0760W, 06th PM, WY

Sec. 017 SW;
020 ALL;
021 S2;
028 N2;
029 E2,NENW,SW;

Converse County

Casper FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications

to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Casper Field Office GIS database; (3) protecting *Cynomys ludovicianus* (Black-tailed prairie dog).

WY-1108-051 480.000 Acres
T.0390N, R.0760W, 06th PM, WY
Sec. 032 SENW;
 033 SWNW;
 034 NWNE,SENE,W2;

Converse County

Casper FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

TLS (1) Feb 1 to Jul 31; (2) as mapped on the Casper Field Office GIS database; (3) protecting nesting Raptors.

CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Casper Field Office GIS database; (3) protecting *Cynomys ludovicianus* (Black-tailed prairie dog).

WY-1108-052 269.560 Acres
T.0400N, R.0760W, 06th PM, WY

Sec. 019 SESW;
 030 LOTS 3,4;
 030 N2NE,E2SW;

Converse County
Casper FO
Formerly Lease No.
Stipulations:
Lease Notice No. 1
Lease Notice No. 2
Lease Notice No. 3
Special Lease Stipulation

WY-1108-053 638.600 Acres
 T.0380N, R.0770W, 06th PM, WY
 Sec. 001 LOTS 1-4;
 001 S2N2,S2;

Converse County
Casper FO
Formerly Lease No.
Stipulations:
Lease Notice No. 1
Lease Notice No. 2
Lease Notice No. 3
Special Lease Stipulation

WY-1108-054 80.000 Acres
 T.0380N, R.0780W, 06th PM, WY
 Sec. 012 W2NE;

Natrona County
Casper FO
Formerly Lease No.
Stipulations:
Lease Notice No. 1
Lease Notice No. 2
Lease Notice No. 3
Special Lease Stipulation
TLS (1) Feb 1 to Jul 31; (2) as mapped on the Casper Field Office
GIS database; (3) protecting nesting Raptors.

WY-1108-055 40.000 Acres
 T.0380N, R.0780W, 06th PM, WY
 Sec. 034 NENW;

Natrona County
Casper FO
Formerly Lease No.
Stipulations:
Lease Notice No. 1
Lease Notice No. 2
Lease Notice No. 3
Special Lease Stipulation

APPENDIX G

Newcastle Field Office Parcel List with Stipulations

Deleted stipulations are signified in purple and strikeout.
Inserted stipulations are signified in red.
Deferrals have a heading in All Caps, red and underlined.

WY-1108-001 40.000 Acres
T.0370N, R.0620W, 06th PM, WY
Sec. 017 NWNW;

Niobrara County

Newcastle FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

WY-1108-002 197.300 Acres
T.0360N, R.0630W, 06th PM, WY
Sec. 002 LOTS 2;

002 SENE,NESE;

003 LOTS 4;

003 SWNW;

Niobrara County

Newcastle FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

TLS (1) Feb 1 to Jul 31; (2) as mapped on the Newcastle Field Office GIS database; (3) protecting nesting Raptors.

CSU (1) Surface occupancy or use may be restricted or prohibited if paleontological sites exist unless paleontological sites are avoided or the operator and surface managing agency arrive at an acceptable plan for mitigation of anticipated impacts; (2) as mapped on the Newcastle Field Office GIS database; (3) protecting Lance Creek Fossil Area paleontological values.

CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the

continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Newcastle Field Office GIS database; (3) protecting nesting raptors.

WY-1108-003 160.000 Acres

T.0360N, R.0630W, 06th PM, WY

Sec. 006 SE;

Niobrara County

Newcastle FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

TLS (1) Feb 1 to Jul 31; (2) as mapped on the as mapped on the Newcastle Field Office GIS database; (3) protecting nesting Raptors.

CSU (1) Surface occupancy or use may be restricted or prohibited if paleontological sites exist unless paleontological sites are avoided or the operator and surface managing agency arrive at an acceptable plan for mitigation of anticipated impacts; (2) as mapped on the Newcastle Field Office GIS database; (3) protecting Lance Creek Fossil Area paleontological values.

WY-1108-004 160.000 Acres

T.0360N, R.0630W, 06th PM, WY

Sec. 020 S2SE;

028 N2NE;

Niobrara County

Newcastle FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

CSU (1) Surface occupancy or use may be restricted or prohibited if paleontological sites exist unless paleontological sites are avoided or the operator and surface managing agency arrive at an acceptable plan for mitigation of anticipated impacts; (2) as mapped on the Newcastle Field Office GIS database; (3) protecting Lance Creek Fossil Area paleontological values.

WY-1108-005 592.700 Acres
T.0360N, R.0630W, 06th PM, WY
Sec. 030 LOTS 1-2;
 030 E2SW;
 031 LOTS 1-4;
 031 SENW,E2SW,SE;

Niobrara County

Newcastle FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

TLS (1) Feb 1 to Jul 31; (2) as mapped on the Newcastle Field Office GIS database; (3) protecting nesting Raptors.

CSU (1) Surface occupancy or use may be restricted or prohibited if paleontological sites exist unless paleontological sites are avoided or the operator and surface managing agency arrive at an acceptable plan for mitigation of anticipated impacts; (2) as mapped on the Newcastle Field Office GIS database; (3) protecting Lance Creek Fossil Area paleontological values.

WY-1108-006 200.000 Acres
T.0370N, R.0630W, 06th PM, WY
Sec. 020 SESE;
 021 SWSW,SWSE;
 029 W2NE;

Niobrara County

Newcastle FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

CSU (1) Surface occupancy or use may be restricted or prohibited if paleontological sites exist unless paleontological sites are avoided or the operator and surface managing agency arrive at an acceptable plan for mitigation of anticipated impacts; (2) as mapped on the Newcastle Field Office GIS database; (3) protecting Lance Creek Fossil Area paleontological values.

WY-1108-007 160.000 Acres
T.0360N, R.0640W, 06th PM, WY
Sec. 012 NE;

Niobrara County

Newcastle FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

TLS (1) Feb 1 to Jul 31; (2) as mapped on the Newcastle Field Office GIS database; (3) protecting nesting Raptors.

CSU (1) Surface occupancy or use may be restricted or prohibited if paleontological sites exist unless paleontological sites are avoided or the operator and surface managing agency arrive at an acceptable plan for mitigation of anticipated impacts; (2) as mapped on the Newcastle Field Office GIS database; (3) protecting Lance Creek Fossil Area paleontological values.

WY-1108-008 960.000 Acres

T.0570N, R.0670W, 06th PM, WY

Sec. 022 E2;
023 ALL;

Crook County

Newcastle FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

TLS (1) Feb 1 to Jul 31; (2) as mapped on the Newcastle Field Office GIS database; (3) protecting nesting Raptors.

TLS (1) Mar 15 to Jul 15; (2) as mapped on the Newcastle Field Office GIS database; (3) protecting nesting Greater sage-grouse.

CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Newcastle Field Office GIS database; (3) protecting *Centrocercus urophasianus* (Greater Sage-grouse).

WY-1108-009 40.290 Acres

T.0530N, R.0680W, 06th PM, WY

Sec. 009 LOTS 16;

Crook County

Newcastle FO

Formerly Lease No.

Stipulations:

Lease Notice No. 1

Lease Notice No. 2

Lease Notice No. 3

Special Lease Stipulation

APPENDIX H

Comments and Responses

#	Commentor	Comment	Response
1	Biodiversity Conservation Alliance, et al, (BCA)	BLM should consider deferring leasing in sage grouse habitats in the Casper and Newcastle Field Offices due to the active Sage Grouse RMP Amendments planning process currently underway pursuant to IM 2004-110 Change 1.	The BLM did consider deferring all parcels within Sage-grouse habitats. All parcels were analyzed through the Oil and Gas Leasing Screen for Greater Sage-grouse (IM WY-2010-013). Only parcels that fit all the the screening criteria were deferred. Other parcels were also deferred for other reasons such as cultural issues or in the case of the Buffalo Field Office all parcels within Sage-grouse Core Areas or Sage-grouse connectivity area were deferred due to the RMP revision.
2	BCA	The Newcastle Field Office, Parcels 002-007 occur within the Lance Creek Fossil Area, and a v. stipulation is provided. EA at 23. However, this stipulation fails to require a field survey by a qualified paleontologist prior to surface-disturbing activities. We are concerned that the stipulation's reliance on Operators untrained in paleontology to correctly identify important fossil finds before they are damaged or destroyed by heavy equipment is likely to lead to significant impacts to fossil resources. These parcels could be offered by BLM under the proposed CSU stipulation by recognizing the potentially significant impacts and undertaking an S pursuant to NEPA's legal requirements, or alternately by applying a stronger CSU stipulation requiring all areas slated for surface-disturbing activities to be field-cleared by a trained paleontologist prior to the onset of surface-disturbing activities. Approving the auction of these leases under a FONSI is clearly inappropriate in light of the strong potential for significant impacts resulting from Operators lacking paleontological expertise and basic proficiency in identifying fossil finds accidentally damaging fossils or, even worse, identifying and then not reporting fossil finds in order to prevent delays to their corporations' projects.	When a surface disturbing activity is proposed on the lease, the BLM would more than likely require a paleontological survey be completed before the analysis or approval. At the time a condition of approval could also be attached that would require a qualified paleontologist.
3	BCA	Parcel 010 contains a bald eagle nest site, Parcel 034 contains a bald eagle roost along the North Fork of the Cheyenne River, and Parcels 013 through 019 and 024 through 026 also have bald eagle habitat associated with them. EA at 24. It is unclear that the bald eagle nest and roost have an adequate NSO buffer, as the extent of the NSO buffer is not disclosed in the EA, but instead a reference to a GIS database (to which we lack access) is provided. These NSO buffers should be not less than 1 mile in all directions from the nest and roost sites. In addition, the EA suggests but does not definitively state that the other identified bald eagle parcels have nests and/or roosts associated with them. But the CSU stipulation for these parcels do not definitively provide that industrial sites and activities (roads, wellpads) will be offset an adequate distance to protect roosting or nesting birds from significant impacts. Instead, BLM proposes an approach wherein additional and undisclosed protection measures may (but may not) be applied by the agency. The effectiveness of these unknown and undisclosed additional measures cannot be assessed, and thus it is impossible for the reader (or the agency) to determine whether they will prevent significant impacts to bald eagles. We recommend that an additional NSO stipulation of not less than one mile be applied to these parcels so that the BLM can state with some confidence that significant impacts are unlikely.	These stipulations are based on the individual office RMPs. Parcel WY-1108-010 does in fact have 1 mile NSO buffer to protect nesting Bald eagles. Parcel WY-1108-034 does have a NSO stipulation applied to protect roosting Bald eagles. Parcels WY-1108-013-019 and 024-026 are managed under the Buffalo Field Office (BFO) RMP. At the time of development the BFO will manage these parcels to offset any negative effects to Bald eagles. All lease stipulation are developed and written at the RMP level and cannot be changed at the level of this document.

4	BCA	Parcels Oil, 032, 038, and 039 are in sage grouse Core Areas according to the EA. EA at 28. In addition, our maps indicate that Parcels 42, 43, 44 are also inside Core Areas. We strongly recommend that these parcels not be offered for lease.	The BLM did consider deferring all parcels within Sage-grouse habitats. All parcels were analyzed through the Oil and Gas Leasing Screen for Greater Sage-grouse (IM WY-2010-013). Only parcels that fit all the the screening criteria were deferred. Other parcels were also deferred for other reasons such as cultural issues or in the case of the Buffalo Field Office all parcels within Sage-grouse Core Areas or Sage-grouse connectivity area were deferred due to the RMP revision.
5	BCA	Parcels 008 and 14 are in sage grouse connectivity habitat identified under the state policy. EA at 28. The stipulations provided for these parcels do not appear to apply any direct limits on drilling activity. We recommend at minimum placing a one wellpad per square mile maximum density for all oil and gas development on these parcels in order to prevent significant impacts to sage grouse use of these habitats, which is a significant concern in cases where well density exceeds this threshold.	Policy for connectivity habitat guidance is currently being developed to address development in these areas. [See page 8, Section 1.6, for a discussion of development in relation to leasing.] Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed and conditions attached.
6	BCA	Parcels 012, 013, 018 through 021, 023, 026, 030-032, 034, and 036 through 040 appear to include lands in close proximity to sage grouse leks and/or wintering habitat which are outside sage grouse Core Areas. EA at 28. We would first like to observe that the Areas as currently identified in northeast Wyoming appear to be inadequate to population of sage grouse in the Powder River Basin, and if only the grouse in the Core Areas -vives, the small and isolated nature of these populations lends itself to readySSltifpiienlin & I case of stochastic events like drought and/or West Nile virus outbreaks, with scant possibility of recolonization from neighboring habitats. The BLM should be undertaking a cumulative effects analysis of the overall impacts of leasing and development together with other human activities in the Basin to determine whether this leasing, together with all the other impacts in the area, will lead to significant impacts to sage grouse. We are not convinced that the RMP analyses already performed represent a rigorous or adequate analysis to which to tier, and we have significant concerns that additional leasing, paired with the inadequate extent of Core Area designations in this part of the state, will lead to a trend toward extirpation, which would radically increase the chances of Endangered Species listing.	The current Sage-grouse Core Areas were developed by State of Wyoming Sage Grouse Implementation Team (SGIT) in coordination with the Wyoming Game and Fish Department and other Federal Agencies. The Sage-grouse Core Area cannot be changed or altered by individual BLM Field Offices or District Offices. See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD development an analysis of this resource will be completed.
7	BCA	In light of this fact set, BLM should not issue these sage grouse parcels unless a rigorous set of stipulations, far stronger than those provided in the EA, are applied to the parcels.	Oil and gas lease stipulations are developed at the RMP stage. They cannot be changed unless done at that level. Currently the Wyoming BLM is amending six RMPs throughout the state. This amendment is analyzing and developing lease stipulations for the Greater Sage-grouse.
8	BCA	Under Alternative B, 2 parcels would be deferred due to sage grouse. EA at 34. We assume that these parcels lie inside Core Areas. Under this alternative, 4,145 of the 5,536 acres proposed for leasing would be offered for sale at auction. EA at 41-42.	Not a comment.
9	BCA	BLM notes that RMPs are currently being amended for the Newcastle and Buffalo Field Offices (EA at 45), and a sage grouse RMP amendment is also underway, which includes Casper. These plan amendments are likely to include identifying Sage Grouse ACECs (approximately two for each field office) which will be closed to future oil and gas leasing, according to information presented at the Cooperating Agency Meetings for the Sage Grouse RMP Amendments. No land should be offered for lease within Core Areas until sage grouse ACECs are identified, in order to prevent leasing actions taken Sin the August 2011 sale from limiting the range of alternatives in these plan amendments/revisions.	The BLM is well aware of and in constant coordination with the High Plains District Sage Grouse Amendment Team and the ongoing Amendment project. The parcels were not found to be in conflict with future proposals.

10	BCA	<p>We request that all parcels listed above be deferred from the lease sale pending analysis of whether large-block unleased parcels inside Core Areas are being leased, and pending preleasing NEPA pursuant to the new Interior department leasing IM. BLM should do its best to keep largely unleased areas of public land in Core Areas unleased, regardless of mineral ownership patterns. Wyoming sage-grouse populations are some of the largest left in the nation and were relatively stable until the last decade, when sage-grouse populations experienced major declines range-wide. The Wyoming Game and Fish Department reported that since 1952, there has been a 20% decline in the overall Wyoming sage-grouse population, with some fragmented populations declining more than 80%;¹ one of WGFD's biologists reported a 40% statewide decline over the last 20 years.² These declines are attributable at least in part to habitat loss due to mining and energy development and associated roads, and to habitat fragmentation due to roads and well fields. Oil and gas development poses perhaps the greatest threat to sage-grouse viability in the region. The area within 2 to 3 miles of a sage-grouse lek is crucial to both the breeding activities and nesting success of local sage-grouse populations. In a study near Pinedale, sage-grouse from disturbed leks where gas development occurred within 3 km of the lek site showed lower nesting rates (and hence lower reproduction), traveled farther to nest, and selected greater shrub cover than grouse from undisturbed leks.³ According to this study, impacts of oil and gas development to sage-grouse include (1) direct habitat loss from new construction, (2) increased human activity and pumping noise causing displacement, (3) increased legal and illegal harvest, (4) direct mortality associated with reserve pits, and (5) lowered water tables resulting in herbaceous vegetation loss. These impacts have not been thoroughly evaluated with full NEPA analysis.</p>	<p>See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.</p>
11	BCA	<p>There is substantial new information in recent studies to warrant supplemental NEPA analysis of the impacts of oil and gas development to sage-grouse. It is incumbent upon BLM to consider the most recent scientific evidence regarding the status of this species and to develop mitigation measures which will ensure the species is not moved toward listing under the Endangered Species Act. It is clear from the scientific evidence that the current protections are inadequate and are contributing to the further decline of the bird's populations. This information constitutes significant new information that requires amendment of the Resource Management Plans before additional oil and gas leasing can move forward.</p>	<p>See page 24, Section 3.3.3. The BLM is aware of this new information and policy and is including it in this document. The BLM, as you are aware, has begun the process of amending six RMPs in the state for sage grouse in addition to adding this new information to the ongoing RMP revisions.</p>
12	BCA	<p>Wyoming Game and Fish Department biologists have reached a consensus that the Timing Limitation Stipulations proposed for sage-grouse in this lease sale are ineffective in the face of standard oil and gas development practices. These stipulations have likewise been condemned as inadequate by the U.S. Fish and Wildlife Service and renowned sage-grouse expert Dr. Clait Braun. and renowned sage-grouse expert Dr. Clait Braun. The BLM itself has been forced to admit that "New information from monitoring and studies indicate that current RMP decisions/actions may move the species toward listing...conflicts with current BLM decision to implement BLM's sensitive species policy" and "New information and science indicate 1985 RMP Decisions, as amended, may not be adequate for sage grouse."⁷ Continued application of stipulations known to be ineffective in the face of ig evidence that they do not work, and continuing to drive the sage-grouse toward ESA listing in violation of BLM Sensitive Species policy, is arbitrary and capricious and an abuse of discretion under the Administrative Procedures Act.</p>	<p>Comments received from the Wyoming Game and Fish and US Fish and Wildlife Service were received and this issue was not expressed although the addition of CSUs to all parcels was.</p>

13	BCA	<p>The vague stipulations included in BLM's Notice of Competitive Oil and Gas Lease Sale for particular parcels do little to clarify to the interested public or potential lessees what restrictions might actually apply to protect sage-grouse populations. For some parcels, BLM imposes a Timing Limitation Stipulation and a Controlled Surface Use Stipulation. Such acceptable plans for mitigation of anticipated impacts must be prepared prior to issuing the lease in order to give the public full opportunity to comment, and to abide by the Department of Interior's stated new policy to complete site-specific environmental review at the leasing stage, not the APD stage. Without site-specific review and opportunity for comment, neither the public nor potential lessees can clearly gauge how restrictive or lax "acceptable plans for mitigation" might be, and whether they comply with federal laws, regulations, and agency guidelines and policies. Thus, absent such review, the leases should not issue at all.</p>	<p>See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.</p>
14	BCA	<p>Again, it is in all interested parties favor (conservation groups, potential lessees, BLM and other federal agencies) for BLM to determine specific "modifications" prior to issuing leases, such as NSO restrictions. If the BLM fails to do so through site-specific environmental review before the APD stage, the agency will violate the "jeopardy" prohibition in the Endangered Species Act and will not adhere to the directive of Secretary Salazar and the Department of Interior's announced leasing reforms.</p>	<p>See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.</p>
15	BCA	<p>BCA recommends withholding the sale of all lease parcels which contain sage-grouse leks, nesting habitat, breeding habitat, wintering habitat and brood-rearing habitat. We request that these parcels be withdrawn from the lease sale. Failing withdrawal of the parcels, parcel-by-paragraph NEPA analysis should occur, and NSO stipulations must be placed on all lease parcels with sage-grouse leks. In addition, three-mile buffers must be placed around all leks. It is critical that these stipulations be attached at the leasing stage, when BLM has the maximum authority to restrict activities on these crucial habitats for the protection of the species, and that no exceptions to the stipulations be granted. BLM's failure to do so will permit oil and gas development activities which will contribute to declining sage-grouse populations and ultimately listing by the U.S. Fish and Wildlife Service as a threatened or endangered species, in violation of BLM's duty to take all actions necessary to prevent listing.</p>	<p>See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.</p> <p>Oil and gas lease stipulations are developed at the RMP. They cannot be changed unless done at that level. Currently the Wyoming BLM is amending six RMPs throughout the state. This amendment is analyzing and developing lease stipulations for the Greater Sage-grouse.</p>
16	BCA	<p>We are concerned with air quality impacts to Class I airsheds, particularly those downwind of northeastern Wyoming in the Black Hills and neighboring grasslands (such as Badlands National Park). The EA states, "The amount of increased emissions cannot be quantified at this time since it is unknown how many wells might be drilled, the types of equipment needed if a well were to be completed successfully (e.g. compressor, separator, dehydrator) or what technologies may be employed by a given company for drilling any new wells." EA at 34. This would not be the case if BLM applied stipulations requiring more stringent requirements on what technologies are employed,. For instance, BLM could require that green completions be employed, preventing venting or flaring of natural gas and other products during completion and fracking. This is discussed in the context of possibly placing Conditions of Approval on activities at the project stage EA at 38. Far better for the environment, and fairer to the Operators, to emplace stipulations on the leases so that such restrictions, when required, would not be a surprise burden on the Operator but a mutually understood precondition of development at the moment the lease is purchased. BLM could also emplace stipulations which required that condensate tanks be constructed to prevent the release of volatile organic compounds (VOCs), which are an important precursor to ozone pollution. These types of pollution could have significant impacts to air quality throughout the regional airshed, and their prevention is too important to leave to chance decision making by oil and gas operators.</p>	<p>See page 8, Section 1.6, for a discussion of development in relation to leasing.</p> <p>Since development cannot be reasonably determined at the leasing stage, the impacts to air quality and airsheds cannot realistically be analyzed at this time. The RMPs did address air quality to the best of the available science at the time, though. Therefore attaching mitigations to these resources based on impacts would be flawed and unreliable. At the time of APD an analysis of this resource will be completed.</p>

17	BCA	Parcel #10 appears to be in an area of the Thunder Basin National Grassland where reintroduction of the Endangered black-footed ferret is likely to occur. The BLM has not undertaken a programmatic analysis of the impacts of drilling on black-footed ferrets, nor has the Forest Service under its Grasslands LRMP.	Parcel WY-1108-010 is located on private surface/federal minerals. The BLM has no jurisdiction on the Thunder Basin National Grassland nor is the BLM leasing oil and gas under these lands at this time. A controlled surface use (CSU) stipulation for Black-tailed prairie dogs was applied to the parcel. See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.
18	BCA	The black-footed ferret is listed as 'Endangered' under the Endangered Species Act, and is widely regarded as the rarest land mammal in North America. Parcel #10 is proposed for sale which are within a black-footed ferret recovery area and could potentially impact active prairie dog complexes upon which ferrets depend, and for which programmatic NEPA analysis does not exist to support oil and gas leasing. BLM must consider No Surface Occupancy stipulations or (at minimum) deferral of the sale of these lease parcels until such time as a full and adequate NEPA analysis has been performed regarding impacts of oil and gas leasing and development on black-footed ferrets and the black-tailed prairie dogs upon which they depend, and the development of adequate and scientifically supported mitigation measures to be applied as lease stipulations.	Parcel WY-1108-010 is located on private surface/federal minerals. A controlled surface use (CSU) stipulation for Black-tailed prairie dogs was applied to the parcel. See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.
19	BCA	<p>The lease parcels in question do not contain stipulations specific to addressing impacts to blackfooted ferrets. In Center for Native Ecosystems v. BLM (170 IB LA 331), the Board ruled that BLM lacked authority to issue leases in a potential black-footed ferret reintroduction area where the existing NEPA had not addressed impacts of oil and gas leasing to ferrets and mitigation measures virtually identical to the one listed below were applied. The Board concluded that "it is BLM's legal obligation to consider such information in a NEPA document." Center for Native Ecosystems, 170 IB LA 331, 348. This ruling is buttressed by a similar decision in Center forNative Ecosystems et al. v. BLM(174 IBLA 361, 2008). The lease parcels in question include only the following generic and speculative stipulation which might possibly apply:</p> <p>"The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; (2) as mapped on the Rawlins Field Office GIS database; (3) protecting Species affected by water depletions from the Platte River system."</p> <p>In this case, as in Center for Native Ecosystems, the BLM has failed to prepare an environmental analysis describing the effects of the proposed action or the adequacy of the proposed stipulation. These leases may therefore not be approved pending the remedy for the aforementioned legal deficiencies.</p>	<p>The BLM did add stipulations for black footed ferret reintroduction areas. (see Appendices E, F, and G). The stipulation quoted is from the Rawlins Field Office and has no bearing on the document.</p> <p>The US Fish and Wildlife Service has reviewed the document and no comment was made concerning this issue.</p>

20	BCA	<ul style="list-style-type: none"> • jile Alternative B is demonstrably superior to Alternative C, it still does not take into account potentially significant impacts to sensitive wildlife and fossil resources as outlined above. As a result, it is likely that significant impacts will occur as a result of the leasing of parcels with sensitive resources listed above, for which an EIS should be undertaken. We would urge BLM to avoid this outcome by declining to offer for lease the above-listed parcels with sensitive resources or, alternately, by attaching more stringent lease stipulations than those proposed, stipulations that can be definitively said to reduce impacts below the threshold of significance. 	<p>See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.</p> <p>The RMP process is the avenue to set mitigation. Currently the High Plains District is amending two RMPs while the Buffalo Field Office is revising their RMP. These projects are considering all current information for the Greater Sage-grouse.</p> <p>The BLM is in constant coordination with the High Plains District Sage Grouse Amendment Team and the Buffalo RMP Revision Team. Two parcels were found to be in conflict with alternatives within either of these projects and were deferred in Alternative B - the Proposed Action.</p>
21	Powder River Basin Resource Council, et al... (PRBRC)	<p>BLM should defer leasing until the land use plans that are currently being revised or amended are completed. Alternatively, BLM must prepare an environmental impact statement (EIS) for these leases because existing NEPA analysis under the current RMPs is outdated (the reason for the revision and/or amendment). Therefore, BLM cannot lawfully tier to the outdated NEPA and use it as a substitute for an EIS. Leasing the number of parcels BLM has proposed is a major federal action significantly impacting the environment and an EIS is required.</p>	<p>The BLM is well aware of and in constant coordination with the High Plains District Sage Grouse Amendment Team and the ongoing Amendment project. The parcels were not found to be in conflict with future proposals.</p> <p>The BLM disagrees that the RMPs as amended are outdated or that the leasing of federal lands requires an EIS.</p>
22	PRBRC	<p>The requirement for pre-lease, site-specific NEPA analysis in the context of BLM's oil and gas leasing program was affirmed in a recently decided 10th Circuit Court of Appeals case, <i>State of New Mexico v. BLM</i>, 565 F.3d 683, 716-719 (10th Cir. 2009). The law of the 10th Circuit - set forth in <i>New Mexico v. BLM</i> - holds that NEPA requires an analysis of the site-specific impacts of oil and gas leasing prior to issuance of the lease if "any environmental impacts are reasonably foreseeable at the leasing stage." <i>Id.</i></p>	<p>See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.</p>
23	PRBRC	<p>Pre-leasing NEPA analysis is also specifically needed for coalbed methane (CBM) development. Regarding proposed leasing in the Buffalo Field Office, the High Plains EA fails to analyze the distinct and unique impacts of CBM drilling and development. In <i>Pennaco</i>, BLM tried to claim that "CBM well requirements and impacts fall within the range of those for other oil and gas wells." <i>Pennaco Energy, Inc. v. U.S. Dept. of the Interior</i>, 377 F.3d 1147, 1157 (10th Cir. 2004), quoting Affidavit of Richard Zander, former BFO Manager. The Tenth Circuit Court of Appeals rejected this claim and held that existing NEPA documents did not address the "unique environmental concerns" of CBM development. <i>Id.</i> at 1159. BLM has a duty under NEPA, and specifically under <i>Pennaco</i>, to do pre-leasing analysis of the impacts of using leases specifically for CBM development. If the leases are likely to be used for CBM development, BLM must do additional NEPA analysis to analyze the unique environmental concerns.</p>	<p>BFO has suspended oil and gas leasing in formations that have potential for coal bed natural gas until the RMP revision is finished. Leases are still being offered in the BFO in those areas that are not underlain with coal and hence have no potential to produce coal bed natural gas.</p>
24	PRBRC	<p>Some of the areas being proposed for leasing may be in areas recently designated by the state of Wyoming as concentrated development areas. Further development in these areas and areas near concentrated development areas may put further stress on the environment and public health. These conditions must be carefully evaluated and the worst possible scenarios considered before further leasing occurs.</p>	<p>See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.</p>
25	PRBRC	<p>Because of real events, which have already happened, air quality, surface water and groundwater conditions should be fully identified and future acute and cumulative impacts considered before leasing.</p>	<p>See page 8, Section 1.6, for a discussion of development in relation to leasing.</p> <p>Since development cannot be reasonably determined at the leasing stage, the impacts to air quality, surface or ground water cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.</p>

26	PRBRC	Approved plans for air monitoring including speciated VOC monitoring, along with the most stringent best available control technologies (BACT) controls should be part of lease requirements.	See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts to air quality and airsheds cannot realistically be analyzed at this time. Therefore attaching mitigations or requirements for plans for these resources based on impacts would be flawed and unreliable.
27	PRBRC	In addition to state and federal plans for handling wastes and contaminants, such as the Spill Prevention Control and Countermeasure Plans, groundwater flow mapping must be provided before lands are leased. Hydrogeologic mapping will help to provide information on how contaminants and contamination plumes may move when impacts from drilling fluid spills, well stimulation fluids, solid chemical spills, trash scatter on and off the well pads, and hydrocarbon or gas releases occur. In addition, a full list of all fluids that are anticipated to be used during exploration, drilling and through production must be provided to the public and BLM before leasing to allow protections to be put in place to protect public lands and public health.	See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.
28	PRBRC	NEPA prescribes limitations on the actions that agencies may take while preparing environmental documents. The regulations implementing NEPA require that “[a]gencies shall not commit resources prejudicing selection of alternatives before making a final decision . . .” and that until a record of decision is issued no action concerning the project can be taken which will “[h]ave an adverse environmental impact” or “[l]imit the choice of reasonable alternatives.” 40 C.F.R. §§ 1502.2(f), 1506.1(a)(1)-(2). Additionally, IM 2004-110 Change 1 provides that State Offices “are to consider temporarily deferring oil, gas and geothermal leasing on federal lands with land use plans that are currently being revised or amended.” BLM must abide by these policies and regulations.	The BLM did consider deferring lease parcels however, additional information did not warrant deferral.
29	PRBRC	These restrictions are especially important when it comes to sage-grouse. Many parcels proposed to be leased are in sage-grouse core areas or sage-grouse connectivity areas prioritized by the State of Wyoming in Executive Order and currently being considered by the BLM through RMP amendments and revisions. On May 28, 2010, BLM Wyoming published a Notice of Intent to prepare an EIS and RMP Amendment for the Casper, Kemmerer, Pinedale, Rock Springs, Newcastle, and Rawlins Field Offices to revise sage-grouse and sagebrush management direction to incorporate policies set forth in BLM Wyoming Instruction Memoranda (IM) 2010-012 and 2010-013. 75 Fed. Reg. 30054 (May 28, 2010). Additionally, the Big Horn Basin and the Buffalo Field Office are revising their RMPs in large part because of sage-grouse. No BLM office has issued a draft RMP amendment for sage-grouse yet. Additional leasing in sage-grouse habitat, especially core areas and connectivity areas, may foreclose alternatives that would have been available had leasing not occurred.	The BLM is aware of and in constant coordination with the High Plains District Sage Grouse Amendment Team and the Buffalo RMP Revision Team. Two parcels were found to be in conflict with alternatives within either of these projects and were deferred in Alternative B - the Proposed Action.
30	PRBRC	Scientific studies have clearly demonstrated that existing lease stipulations, including year-round and seasonal buffers around leks, do not prevent population decline. In many cases, BLM has been involved in this research and is clearly aware of its findings. Considering it is the state’s goal to maintain, and in fact enhance, sage-grouse populations in core areas, BLM should not be leasing in core areas with current stipulations (or even with controlled surface occupancy stipulations that do not specifically identify new protective measures).	The BLM is aware of and in constant coordination with the High Plains District Sage Grouse Amendment Team and the Buffalo RMP Revision Team. Two parcels were found to be in conflict with alternatives within either of these projects and were deferred in Alternative B - the Proposed Action. Oil and gas lease stipulations are developed at the RMP. They cannot be changed unless done at that level. Currently the Wyoming BLM is amending six RMPs throughout the state. This amendment is analyzing and developing lease stipulations for the Greater Sage-grouse.
31	PRBRC	If BLM wishes to proceed with leasing, it must prepare an EIS because of outdated and inadequate NEPA analysis linked with the existing RMPs.	The BLM disagrees that the RMPs as amended are outdated or that the leasing of federal lands requires an EIS.

32	US Fish and Wildlife Service (USFWS)	The EA should include determinations of effects for endangered, threatened or proposed species or critical habitat found within the EA analysis area. No analyses are offered with respect to federally threatened, endangered, proposed, or candidate species. The EA does; however, include a stipulation, referred to as a “controlled surface use” or CSU that states the following: “BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation...”	See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed. Effects determinations for T&E species will be made at the APD stage when detailed site specific development plans are submitted. Further analysis for T&E species will be conducted as necessary at that time.
33	USFWS	The above CSU should be modified throughout the EA as follows: the text “is likely to result in jeopardy to the continued existence of” should be changed to “may effect.”	Stipulations for Oil and Gas Leasing are developed at the RMP stage. These stipulations cannot be changed unless done at that level through a Plan amendment or revision. Currently the Wyoming BLM is amending six RMPs throughout the state and this amendment is analyzing and developing lease stipulations for the Greater Sage-grouse. The other four plans are all going through RMP revisions that will address this issue.
34	USFWS	We encourage the Bureau to incorporate the modified CSU into all future oil and gas lease NEPA documents.	Stipulations for Oil and Gas Leasing are developed at the RMP stage. These stipulations cannot be changed unless done at that level through a Plan amendment or revision. Currently the Wyoming BLM is amending six RMPs throughout the state and this amendment is analyzing and developing lease stipulations for the Greater Sage-grouse. The other four plans are all going through RMP revisions that will address this issue.
35	USFWS	The EA states, “individual parcels may contain threatened, endangered, candidate, or BLM sensitive species (see Section 3.0 and Appendix A).” However, in chapters three and four the EA provides insufficient information to determine presence or absence of listed species within the project area. For example, 22 parcels proposed for leasing did not receive on the ground site visits to determine the presence or absence of endangered, threatened, proposed or candidate species or the habitats upon which these species depend. Chapter four of the EA does not analyze the potential direct, indirect and cumulative effects of the issuance of these Federal leases on endangered, threatened, proposed and candidate species or the habitats upon which these species depend. In addition, determinations of effect are not made regarding threatened, endangered or proposed species or critical habitat found within the EA planning area. The EA relies on the issuance of a lease stipulation advising the lessee that, “BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation...” However, this lease stipulation is not applied to all parcels proposed for leasing. We recommend this lease stipulation be included in all Federal oil and gas leases issued by the Bureau.	The EA quote concerning individual parcels comes from Section 1 and further states: "The administrative act of offering and subsequent issuance of oil and gas leases is consistent with the decisions in the Buffalo, Casper and Newcastle RMPs, including decisions relating to threatened, endangered, candidate, and BLM sensitive species. Offering and subsequent issuance of oil and gas leases is also consistent with the Biological Assessments and Biological Opinions for these RMPs. No further consultation with the U. S. Fish and Wildlife Service (USFWS) is currently required." See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed. Effects determinations for T&E species will be made at the APD stage when detailed site specific development plans are submitted. Further analysis for T&E species will be conducted as necessary at that time. By law, BLM is required to protect T&E species so even if a stipulation is not on the lease, protection is guaranteed thru the law on private as well as federal or state lands. The stipulation is applied only to parcels that have known T&E habitat present. If at the APD development stage, T&E habitat or species are present, then an effects determination and further analysis will be conducted.

36	USFWS	<p>On October 5, 2010, Service biologists assigned to the Bureau’s Buffalo Field Office pursuant to Section 365 of the Energy Policy Act of 2005 attended a meeting with the Bureau to discuss oil and gas leasing reform. During that meeting, it was agreed that the Service would be included in the review process for parcels proposed for leasing. This is in accordance with the MOU implementing Section 365 of the Energy Policy Act of 2005, which states, “Bureau pilot offices will focus on interagency coordination and cooperation in the processing of permits required to support oil and gas use authorizations.” The 55 proposed lease parcels were not available for Service review during the planning and analysis process leading up to the issuance of this EA. In addition to the identification of issues pertinent to listed species, Service involvement during the planning process will improve processing time for oil and gas leasing parcels during site-specific analysis when issuing Federal Applications for Permit Drill (APDs).</p>	<p>At the meeting referenced, no decision was made as to whether the USFWS employees stationed in the Buffalo Field Office would be part of the process or not. The High Plains District Office (HPDO) representatives committed to consult with the BLM Wyoming State Office (WSO) on this subject. The WSO and HPDO subsequently decided that the USFWS would allow more meaningful participation at the public review stage.</p>
37	USFWS	<p>Page 8, Section 1.6 Identification of Issues: The third paragraph on this page states, “field visits were performed on those parcels that the BLM had access or access was allowed by the surface owners. Of the 55 parcels, 22 were granted access from the landowner. Another 11 parcels were visited using public access like county or State roads.” “Geographical Information System (GIS) data and Digital Ortho Photo Quads (DOQQ) were used regardless of whether or not the field teams could visit the parcels but were predominantly relied on for the review of the 22 parcels that could not be visited by the FO teams.” The above paragraph states that 22 parcels proposed for leasing did not receive on the ground analysis of the presence or absence of endangered, threatened, proposed or candidate species or the habitats upon which these species depend. We recommend the EA differentiate these 22 lease parcels from the other parcels, which did receive on the ground analysis of the presence or absence of endangered, threatened, proposed, or candidate species, and that the Bureau include additional cautionary lease notice or protective measures for these parcels. The Service is unclear how the Bureau analyzed the potential for endangered, threatened, proposed or candidate species or the habitats upon which these species depend, to occur on these 22 lease parcels. We recommend the Bureau defer the 22 proposed lease parcels, while the Bureau works with Service biologists to assess occurrence of endangered, threatened, proposed or candidate species or the habitats upon which these species depend and to develop conservation measures as appropriate.</p>	<p>The BLM compared all parcels against known T&E habitats using GIS and DOQQs (see page 8). If at the APD development stage, T&E habitat or species are present, then an effects determination and further analysis will be conducted.</p> <p>The BLM must request access to or across private land in order to conduct some of the field visits in the High Plains District. As such if access is not granted, the BLM is unable to perform field visits. Therefore, it is infeasible to conclude that those parcels should be deferred the field visits could be conducted as access could never be granted.</p>
38	USFWS	<p>Page 24, Section 3.3.3.1-Bald Eagle: On page 24 of the EA, the authors use the acronyms NSO and CSU . However, these acronyms are never defined to the reader in the EA or the appendices. We recommend the final NEPA document include a glossary for all acronyms used in the document.</p>	<p>Added to EA under Section 3.3.3 page 24.</p>
39	USFWS	<p>Wildlife populations, including threatened, endangered, proposed and candidate species and other special status species are dynamic. Because surveys do not identify occupied habitat one year, this does not exclude the possibility that the same area may become occupied by threatened endangered or proposed species in the future, particularly when a federal lease is valid for ten years. Given the generic nature of the above lease notice, we recommend this lease notice be added to all federal lease parcels in this EA and all future lease parcels issued by the Bureau . The fourth sentence in the above lease notice states, “BLM will not approve any ground disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act...” We recommend the direct, indirect and cumulative effects of these lease actions also be addressed in the lease notice. Adverse effects to listed species can and do occur from non-ground disturbing activities. For example, human presence associated with pre-construction activities, such as surveying or route staking, if occurring near a nest, den or burrow, could result in adverse affects to a species listed as threatened or endangered under the Act.</p>	<p>The BLM assumes that when the phrase "lease notice" is used that it is meant as the CSU stipulation. The RMP process is the avenue to set mitigation including the size of the Sage-grouse lek buffers. Currently the High Plains District is amending two RMPs while the Buffalo Field Office is revising their RMP. These projects are considering all current information for the Greater Sage-grouse.</p> <p>The BLM is in constant coordination with the High Plains District Sage Grouse Amendment Team and the Buffalo RMP Revision Team. Two parcels were found to be in conflict with alternatives within either of these projects and were deferred in Alternative B - the Proposed Action.</p> <p>See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.</p>

40	USFWS	We recommend the fourth sentence in your lease notice be revised to read as follows: BLM will not approve any federal action or authorization that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation.	Stipulations for Oil and Gas Leasing are developed at the RMP stage. These stipulations cannot be changed unless done at that level through a Plan amendment or revision. Currently the Wyoming BLM is amending six RMPs throughout the state and this amendment is analyzing and developing lease stipulations for the Greater Sage-grouse. The other four plans are all going through RMP revisions that will address this issue.
41	USFWS	Page 28, Section 3.3.3.4-Greater sage-grouse: On page 28 of the EA the authors use the acronym TLS . This acronym is never defined to the reader in the EA or an appendix. We recommend the final NEPA document include a glossary for all acronyms used in the document.	Added to EA under Section 3.3.3 page 24.
42	USFWS	Page 23, Section 3.3.3-Wildlife, Threatened and Endangered, and Sensitive Species Resources and Page 41, 4.2.3 Wildlife, Threatened and Endangered, and Sensitive Species Resources: In the Service’s August 26, 2010, annual species list memorandums to the Bureau’s Buffalo, Casper and Newcastle field offices we identified the mountain plover (<i>Charadrius montanus</i>) as a species proposed for listing under the Act. We recommend the EA provide an analysis of the mountain plover, or otherwise explain why this species was removed from consideration.	The BLM compared all parcels against known T&E habitats using GIS and DOQQs (see page 8). If at the APD development stage, T&E habitat or species are present, then an effects determination and further analysis will be conducted.
43	USFWS	Page 30, Section 3.3.3.5-Raptors: The EA offers no stipulation or lease notice addressing non raptor migratory birds . A lease notice on migratory birds in general at the leasing stage would prevent operators from being informed on short notice (at the APD stage) of the need to comply with the MBTA. Consequently, we recommend the Bureau include notification at the leasing stage.	Section 6 of the Lease and Lease Notice Number 1 both allow the BLM the ability to add additional measures to approvals that would comply with all applicable laws, regulations or policy including MBTA. Individual notifications of every possibility would be a long and cumbersome documentation with no real benefit to all parties involved.
44	USFWS	Executive Order 13186 states Federal agencies will evaluate the effects of proposed actions on all migratory birds (including eagles) pursuant to NEPA “or other established environmental review process;” restore and enhance the habitat of migratory birds, as practicable; identify where unintentional take reasonably attributable to agency actions has, or is likely to have, a measurable negative effect on migratory bird populations; and, with respect to those actions so identified, the agency shall develop and use principles, standards, and practices that will lessen the amount of unintentional take, developing any such conservation efforts in cooperation with the Service. The Service recommends the Bureau evaluate: 1. Whether take is likely to occur from activities associated with the proposed activity; and, 2. The direct, indirect, and cumulative impacts the proposal may have on the ability to meet the preservation standard of the BGEPA, which the Service has interpreted to mean “compatible with the goal of stable or increasing breeding populations.”	See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts as well as a T&E determination cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.
45	USFWS	In your final NEPA document, we recommend the Bureau include all practicable avoidance and minimization measures, requirements for monitoring, and conditions which may necessitate additional mitigation that may be required of lessees. The Bureau also has a responsibility to notify the lease purchaser, project applicant or permittee when activities associated with the proposal are likely to result in take.	The RMP process is the avenue to set mitigation. Currently the High Plains District is amending two RMPs while the Buffalo Field Office is revising their RMP. These projects are considering all current information for the Greater Sage-grouse. The BLM is in constant coordination with the High Plains District Sage Grouse Amendment Team and the Buffalo RMP Revision Team. Two parcels were found to be in conflict with alternatives within either of these projects and were deferred in Alternative B - the Proposed Action. See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.

46	USFWS	We recommend the Bureau fully utilize their authorities to further the conservation of migratory birds by following the Memorandum of Understanding (BLM MOU WO-230-2010-04) between the Bureau and the Service, which outlines a collaborative approach to promote the conservation of migratory bird populations through Executive Order 13186, 66 Fed. Reg. 3853 (January 17, 2001). The Bureau's EA should include an analysis of the species identified in the Service's Birds of Conservation Concern 2008, which includes "species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing" under the Act. This report is intended to stimulate coordinated and proactive conservation actions among Federal, State, and private partners and is available at	Section 6 of the Lease and Lease Notice Number 1 both allow the BLM the ability to add additional measures to approvals that would comply with all applicable laws, regulations or policy including MBTA. Individual notifications of every possibility would be a long and cumbersome documentation with no real benefit to all parties involved.
47	USFWS	Page 41, Section 4.2.3 Wildlife, Threatened and Endangered, and Sensitive Species Resources: In this section (Effects Analysis) there is no analysis of the effects of issuing leases to federally listed or proposed species, or how the lease stipulations would minimize the impacts of lease issuance. Rather a determination of whether a proposed action would affect listed or proposed species is deferred to the stage of the oil and gas development process.	See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.
48	USFWS	The EA references the reasonably foreseeable development (RFD) scenarios for the Buffalo and Casper Field offices, but does not include them in the NEPA document. We recommend the EA include a matrix depicting the average acreage of disturbance associated with the issuance of an APD for an oil well, natural gas well and a coalbed natural gas well drilled using vertical, directional and horizontal technologies. In addition, the EA should provide data and analyses linking the RFDs with the estimates of disturbance associated with the various types of wells and drilling technologies currently being used in Wyoming.	See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed. Also the RFDs are public documents available to the public for review.
49	USFWS	Appendix E, Buffalo Parcel list with Stipulations: Appendix E identifies some lease parcels with the below lease stipulation and some without. In addition, some lease parcels identify the CSU as protecting a particular species or multiple species. For example, the CSU included under lease parcel WY-1108-011 states, "CSU (1) The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation; consultation; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting <i>Centrocercus urophasianus</i> (Greater Sagegrouse)." We are unclear why the CSU would specifically identify greater sage-grouse in item (3) of this CSU, when the first sentence of the CSU states, "the lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species." If in this example, it is the Bureau's intent to apply this lease stipulation only to greater sage-grouse, the Service believes this is unnecessary, since the first sentence applies to all special status species. As stated above, we like the use of this general lease stipulation, which advises the purchaser of the Federal lease parcel that they may have to consider endangered, threatened, proposed species and Bureau special status species when they start to develop their Federal lease. We recommend this lease stipulation be added to all proposed lease parcels in this EA and all future lease parcels issued by the Bureau in Wyoming. This is consistent with the Bureau's State Office approach to processing Federal coal lease applications.	All parcels were screened and if any parcel fell within the 2 mile buffer (or other buffer dictated by the governing RMP) of a sage grouse lek then the CSU and/or TLS were applied. The Greater Sage-grouse was addressed specifically in WY-1108-011 because a portion of the parcel fell within a 2 mile buffer of a document Sage-grouse lek. This parcel was deferred because it fell within a Sage-grouse Core Area. Stipulations for Oil and Gas Leasing are developed at the RMP stage. These stipulations cannot be changed unless done at that level through a Plan amendment or revision. Currently the Wyoming BLM is amending six RMPs throughout the state and this amendment is analyzing and developing lease stipulations for the Greater Sage-grouse. The other four plans are all going through RMP revisions that will address this issue. The BLM also feels that Lease Notice 1 and Section 6 of the Lease is sufficient to protect T&E and special status species.

50	USFWS	In Lease parcel WY-i 108-01 lit is unclear why “TLS (1) February to July 31; (2) as mapped on the Buffalo Field Office GIS database; (3) protecting nesting raptors” is removed from this lease. We recommend this TLS remain attached to these Federal leases.	The raptor stipulation was removed from WY-1108-001 because there are no known raptor nests or ½ mile buffers that occur in that parcel. The stipulation was added to the preliminary list by the WY BLM state office in error.
51	Center for Native Ecosystems (CNE)	CNE asks the BLM to withdraw all parcels in greater sage-grouse core areas or within 4 miles of an occupied lek. These actions will insure that BLM’s leasing of these parcels do not lead to the extinction of this species. Further analysis should also be conducted into the affects of leasing parcels within greater sage-grouse habitat.	See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed. Oil and gas lease stipulations are developed at the RMP and State Office level. They cannot be changed unless done at that level. Currently the Wyoming BLM is amending six RMPs throughout the state. This amendment is analyzing and developing lease stipulations for the Greater Sage-grouse.
52	CNE	It appears that parcels 41, 42, 44, 45, 46, 53, and 54 are within designated Areas of Critical Environmental Concern (ACEC). Leasing for oil and gas development is not appropriate within these ACECs. We would ask that BLM withdraw these parcels from the lease sale.	The Salt Creek Hazardous ACEC (Decision 7015) was not carried forward in the 2007 Casper Field Office RMP.
53	CNE	The Black footed ferret is one of the most endangered mammals in North America. Parcels 10, 24, 25, and 26 contain habitat that has been determined to be potential reintroduction areas for this species. We would ask that the BLM analyze and take into consideration how leasing these parcels will affect the chance to reintroduce black footed ferrets in the future.	The large majority of these parcels occur on private surface/federal minerals. A controlled surface use (CSU) stipulation for Black-tailed prairie dogs was applied to the parcel with documented prairie dog towns. See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD development a complete analysis regarding prairie dogs and black-footed ferrets will take place if needed.
54	CNE	Oil and gas development authorized by the leasing of the protested parcels will have significant impacts on greater sage-grouse. A number of the protested parcels are located within a four mile buffer around occupied greater sage-grouse leks. Some of the parcels directly overlap with greater sage-grouse leks. In addition, a number of the protested parcels are within greater sage-grouse core areas. (Information on overlap between protested parcels and the above types of sage-grouse habitat was obtained from a GIS overlay of the parcels proposed for leasing and sage-grouse habitat as mapped by the Wyoming Game and Fish Department). Please see Exhibit 1 for details on the overlap between protested parcels and key greater sage-grouse habitat.	See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed. Oil and gas lease stipulations are developed at the RMP and State Office level. They cannot be changed unless done at that level. Currently the Wyoming BLM is amending six RMPs throughout the state. This amendment is analyzing and developing lease stipulations for the Greater Sage-grouse.
55	CNE	We request that all lease parcels with sage grouse leks, nesting habitat, breeding habitat, wintering habitat and brood-rearing habitat contain stipulations which fully comply with and adhere to the Sage-Grouse Habitat Management Guidelines for Wyoming adopted July 24, 2007. Many if not most of the leases are in sage grouse core areas under the Governor’s executive order, yet stipulations that would conform to the state’s policy are not applied. We further request that all lease parcels with sage grouse leks, nesting habitats, breeding habitat, wintering habitat and brood-rearing habitat conform to the recommendations offered in the Wyoming Game and Fish Department’s “Recommendations for Development of Oil and Gas Resources within Important Wildlife Habitats” (included in the list of relevant documents below).	Oil and gas lease stipulations are developed at the RMP and State Office level. They cannot be changed unless done at that level. Currently the Wyoming BLM is amending six RMPs throughout the state. This amendment is analyzing and developing lease stipulations for the Greater Sage-grouse.

56	CNE	<p>This information is essential to adequate NEPA analysis of the likely direct, indirect, and cumulative impacts of oil and gas development on the protested parcels on greater sage-grouse. In addition, this information is crucial to any effort to develop a range of alternatives for oil and gas development, and to develop and analyze the likely effectiveness of lease notices and stipulations applied to the protested parcels to mitigate impacts of oil and gas development on greater sage-grouse to insignificance. The information in these documents constitutes the best available science on greater sage-grouse, and the impacts of oil and gas development on greater sage-grouse. The BLM has not considered the information contained within these documents as part of a National Environmental Policy Act (NEPA) analysis of the impacts of oil and gas development authorized by the leasing of the protested parcels on greater sage-grouse. We hereby incorporate the following documents by reference:</p>	<p>See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.</p>
57	CNE	<p>(See Exhibits 4, 6, 9, 10, 11, 12, 13, 14, and 15). These Exhibits contain information essential to determining how best to sustain greater sage-grouse populations while allowing other uses of the sagebrush landscape to continue. The recommendations contained within each of these Exhibits should be carefully considered and weighed in Wyoming Bureau of Land Management (BLM) Resource Management plans that dictate how greater sage-grouse habitat will be managed for decades to come, and that will likely determine the fate of the greater sage-grouse in the much of the eastern portion of its range. BLM has not adequately considered any of the information in these Exhibits in the Resource Management Plans that the proposed leasing is tiered to, and have therefore failed to 1) make an informed decision regarding what areas should be open and closed to oil and gas leasing and what lease stipulations should be applied to protect greater sage-grouse populations within areas that are open to leasing and development, and 2) have failed to take a hard look at the impacts, particularly cumulative impacts that the activities authorized by the Resource Management Plan (including the proposed leasing of the protested parcels) will have on greater sage-grouse.</p>	<p>Exhibits were not attached to comment.</p> <p>Currently the High Plains District is amending two RMPs while the Buffalo Field Office is revising their RMP. These projects are considering all current information for the Greater Sage-grouse.</p> <p>The BLM is in constant coordination with the High Plains District Sage Grouse Amendment Team and the Buffalo RMP Revision Team. Two parcels were found to be in conflict with alternatives within either of these projects and were deferred in Alternative B - the Proposed Action.</p>

58	CNE	<p>The BLM is a signatory to the Greater Sage-Grouse Comprehensive Conservation Strategy, prepared by the Western Association of Fish and Wildlife Agencies in 2006 (Exhibit 17). The stated goal of this strategy is to “maintain and enhance populations and distribution of sage-grouse by protecting and improving sagebrush habits and ecosystems that sustain these populations.” (Exhibit 17) The overall objective of this strategy is to, “produce and maintain neutral or positive trends in populations and to maintain or increase the distribution of sage-grouse in each management zone.” (Exhibit 17). The document states that the guiding principle of greater sage-grouse management should be to: “1) protect what we have, 2) retain what we’re losing, and restore what has been lost.” (Exhibit 17). However, despite these commitments made as far back as 2006, BLM has taken very little action to meet these goals. In November of 2004, BLM issued a National Sage-Grouse Habitat Conservation Strategy (Exhibit 18), to guide future actions for conserving sagebrush habitats. The strategy recognizes BLM’s key role in the conservation of the species and its habitat, and states that: “one of the BLM’s highest priorities is to implement the National Sage-grouse Strategy on BLM-managed lands... All State Directors and Field Managers will take appropriate actions to ensure immediate implementation.” (See BLM IM 2005-024). Integral to the BLM habitat strategy are guidance documents intended to ensure that sage-grouse conservation measures are incorporated into all ongoing BLM programs and activities, including land use planning, mineral leasing and other programs. A central element of the strategy is the development of alternatives that must identify and evaluate reasonable, feasible and effective options for conserving sagebrush habitats and associated species as required by BLM’s multiple use mandate in FLPMA. Under the Strategy, BLM is required to develop at least one alternative to “maximize conservation of sagebrush habitat through objectives, land use plan decisions and management direction.” Id. Further, the strategy requires BLM to: “...ensure that each alternative contains considerations for sagebrush habitat conservation by (1) developing one or more goals related to sagebrush habitat with emphasis on sage-grouse habitat that will apply to all alternatives, (2) including objectives in each alternative that pertain to the goals, and (3) identifying allowable uses or management actions to achieve the objectives. This method will ensure that all alternative, including the preferred alternative, will include sagebrush and sage-grouse habitat considerations.” Id. BLM has failed to consider an alternative to maximize conservation of sagebrush and sage-grouse habitat in each of the Resource Management Plans to which the proposed leasing is tiered. Wyoming BLM has failed to live up to its commitments outlined in the WAFWA Greater Sage-Grouse Comprehensive Conservation Strategy and the BLM National Sage-Grouse Habitat Conservation Strategy.</p>	<p>Exhibit was not attached to comment.</p> <p>Currently the High Plains District is amending two RMPs while the Buffalo Field Office is revising their RMP. These projects are considering all current information for the Greater Sage-grouse.</p> <p>The BLM is in constant coordination with the High Plains District Sage Grouse Amendment Team and the Buffalo RMP Revision Team. Two parcels were found to be in conflict with alternatives within either of these projects and were deferred in Alternative B - the Proposed Action.</p>
59	CNE	<p>BLM has systematically failed to take appropriate action to conserve greater sage-grouse habitat at a landscape scale. BLM has failed to include an alternative that maximizes conservation of sagebrush and greater sage-grouse habitat in each of its Resource Management Plans in Wyoming. These RMPs prioritize other uses over sagebrush habitat conservation across virtually all of the remaining greater sage-grouse habitat in Wyoming. Further, these RMPs authorize oil and gas development across a significant proportion of the remaining sage-grouse habitat in Wyoming, without considering setting aside core areas or other key habitat from oil and gas leasing (as recommended in Exhibits 4, 6, 9, 10, 11, 12, 13, 14, and 15); or leasing these areas with NSO stipulations; or stipulations recommended by recommended by Western Association of Fish and Wildlife Agencies, Wyoming Game and Fish Department, U.S. Fish and Wildlife Service, or various other state wildlife agencies and sage-grouse experts (see Exhibits 4, 9, 10, 11, 12, 14, 15, 21, 22, 23, and 25). The RMPs in question also systematically fail to adequately consider the cumulative impacts of the human activities authorized over the life of the RMP on greater sage-grouse (see Exhibit 4 for comprehensive assessment of threats to greater sage-grouse and greater sage-grouse habitat that should be considered in each RMP), and fail to take into account the best available science (see all Exhibits), including significant new information (for example, see Exhibits 4, 6, 9, 16, 20, 21, 22, 23, 25).</p>	<p>Exhibits were not attached to comment.</p> <p>Currently the High Plains District is amending two RMPs while the Buffalo Field Office is revising their RMP. These projects are considering all current information for the Greater Sage-grouse.</p> <p>The BLM is in constant coordination with the High Plains District Sage Grouse Amendment Team and the Buffalo RMP Revision Team. Two parcels were found to be in conflict with alternatives within either of these projects and were deferred in Alternative B - the Proposed Action.</p>

60	CNE	<p>Development of energy resources on the federal mineral estate (managed by BLM) poses a major challenge for the conservation of greater sage-grouse (Exhibit 4, Chapter 21). Naugle et al. 2009 (Exhibit 4, Chapter 21) review the best available science documenting the impacts of oil and gas development on greater sage-grouse, examine the potential for landscape-level expansion of energy development within the sage-grouse range, and outline recommended landscape level conservation strategies. This paper constitutes significant new information which BLM should consider prior to authorizing oil and gas development on the protested parcels. Naugle et al. (2009) demonstrate that current and projected impacts from oil and gas development are likely to have severe negative impacts on greater sage-grouse populations. They indicate that severity of impacts will require that management agencies shift from local to landscape-scale conservation, and consider a hierarchy of strategies to conserve greater sage-grouse, including set-aside areas, lease consolidations and more effective mitigation measures and best management practices as creative solutions to reduce losses. BLM has not considered setting aside key habitat from oil and gas development, has not adequately analyzed cumulative impacts of oil and gas development on the protested parcels (including past, present and reasonably foreseeable energy development, climate change, grazing, other human development, etc.), and continues to use mitigation measures that have been demonstrated to be ineffective (see Exhibit 4, Chapter 21). Another recent study forecasts that future oil and gas development will cause a 7-19% decline from 2007 lek population counts and impact more than 9 million acres of sagebrush shrublands and 2 million acres of grasslands (Copeland et al. 2009 attached as Exhibit 20). This is significant new information that should be considered in an analysis of the cumulative impacts of oil and gas development authorized by the leasing of the protested parcels. A number of past studies have demonstrated that oil and gas development has severe impacts on greater sage-grouse and that the mitigation measures typically applied by BLM are not sufficient to prevent significant impacts (see Exhibits 6, 9, 19, 21, 22, 23, 24, 25). This research is well known amongst resource management professionals, BLM has funded some of the research in question, and it has been brought to the attention of BLM by the Western Association of Fish and Wildlife Agencies, the U.S. Fish and Wildlife Service, and nonprofit organizations on multiple occasions in the past (for example see Exhibits 9, 10, 11, 12, 13, 26. BLM has not adequately considered any of this information in the NEPA documents to which the proposed leasing is tiered.</p>	<p>Exhibit was not attached to comment.</p> <p>Currently the High Plains District is amending two RMPs while the Buffalo Field Office is revising their RMP. These projects are considering all current information for the Greater Sage-grouse.</p> <p>The BLM is in constant coordination with the High Plains District Sage Grouse Amendment Team and the Buffalo RMP Revision Team. Two parcels were found to be in conflict with alternatives within either of these projects and were deferred in Alternative B - the Proposed Action.</p> <p>See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.</p>
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61	CNE	<p>The Wyoming BLM’s guidance fails to adequately protect sage-grouse on several counts. First, under the guidance no core areas receive complete protection from development (i.e. leasing and eventual development is allowed even within core areas under certain circumstances). It is not clear from the best available science that even the more stringent protections applied to the governor’s core areas will be effective. For example, the function of some of the provisions in the guidance is to limit development in core areas to less than 5% surface disturbance. However, we are unaware of any scientific studies that suggest that sage-grouse can tolerate 5% surface disturbance over the long-term. The stated goal of the guidelines regarding the core areas is to maintain or reduce the existing level of development, but if a given core area already has high levels of development activity, this may not prevent further declines. Second, several biologically important areas were excluded from the Wyoming governor’s core areas map (which the BLM guidance relies on). This leaves many lek sites and seasonal habitat areas with minimal to no protection from the effects of oil and gas development. Third, the guidance offers very little certainty about what sage-grouse habitat will actually be protected in practice due to a complicated set of exceptions from the standard protections at various stages of the oil and gas development process. There is simply too much wiggle room in the language of the guidelines to provide certainty or comfort about the future status of sage-grouse in Wyoming, even in so-called “core areas.” For example, if it is deemed not feasible to develop a lease right within the standard restrictions in the guidelines, an operator is allowed to provide a mitigation and monitoring plan to the Wyoming BLM and the Wyoming Game and Fish Department and then proceed with development unfettered by the standard restrictions. The guidelines state that in such a case the BLM will monitor to evaluate the effectiveness of the individualized mitigation plan, but no guidance is offered about what the BLM can or will do if the plan is not effective. Given the constraints of an existing lease right, we fear the BLM could find its hands tied about intervening in an inappropriate project under such circumstances. In addition, the guidance includes options to reduce the restrictions within core areas that are of small patch size (less than 725 acres), are already disturbed (currently more than one disturbance per 640 acres), or which are covered by patchy land ownership. Several types of land features, such as two-track roads (which certainly affect sage-grouse), are not included in the calculation of surface disturbance density. In several places, the guidance includes language that a given disturbing activity will be “restricted or prohibited” (e.g. “surface disturbing/disruptive activity within 0.6 miles of a lek will be restricted or prohibited”). There is a big difference in the likely effectiveness of the measure depending on whether the activity in question is restricted or prohibited. The guidance also includes a goal that anthropogenic features in habitat outside of core areas be consolidated. While this is a welcome acknowledgement of the impact of such features, there is no specific requirement designed to meet this goal.</p> <p>Finally, the Wyoming BLM’s guidance for protecting sage-grouse still relies on measures outside of core areas that have been demonstrated to be ineffective. For example, the ¼ mile buffer being applied to leks outside of core areas has been demonstrated to be ineffective and not based on any scientific research. Timing limitations alone do not provide adequate protection because they do not prevent the habitat in question from being harmed or destroyed outside of the season of the timing limitations.</p>	This comment is beyond the scope of this document.
62	CNE	<p>In the case of this proposed lease sale, all of the above-mentioned shortcomings of the Wyoming BLM’s guidelines for protecting sage-grouse certainly apply, but it also appears the guidelines themselves are being insufficiently applied. For example, parcel number WY-1005-037 overlaps with a Wyoming Game and Fish Department-identified core area (the North Glenrock core).</p>	Parcel WY-1005-037 is from the May 2010 Oil and Gas Lease Sale and was not covered in this document.

63	CNE	<p>The BLM should carefully consider the best available science, including recently published research on greater sage-grouse, in determining whether or not to lease the area in question for energy development, and what protective measures to apply if the area is leased for development.</p>	<p>Currently the High Plains District is amending two RMPs while the Buffalo Field Office is revising their RMP. These projects are considering all current information for the Greater Sage-grouse.</p> <p>The BLM is in constant coordination with the High Plains District Sage Grouse Amendment Team and the Buffalo RMP Revision Team. Two parcels were found to be in conflict with alternatives within either of these projects and were deferred in Alternative B - the Proposed Action.</p>
64	CNE	<p>The BLM should carefully consider the following facts in determining whether or not to lease occupied greater sage-grouse habitat for oil and gas development:</p> <ul style="list-style-type: none"> - There is a scientific consensus that it is necessary to conserve large, intact, interconnected expanses of sagebrush habitat over long time frames in order to conserve sage-grouse. - Maintaining the current abundance and viability of populations will not be sufficient to prevent extinction over the long-term. It is essential that abundance and viability of populations be increased. - The current abundance and viability of populations cannot be maintained (much less increased) if activities that result in further loss, degradation and fragmentation of habitat continue. - Remaining habitat continues to be lost, fragmented and degraded by a variety of human activities and other factors, and these trends are likely to continue into the foreseeable future. - The cumulative measure of the human influence on the landscape may be more important than the impacts of individual projects in predicting lek abandonment and population decline, and BLM and FS have not assessed cumulative impacts at an appropriate scale and considered what conservation measures are necessary in occupied habitat given the results of such an assessment. The appropriate place for this assessment is an RMP amendment or revision. - Recent peer reviewed research on greater sage-grouse suggests that the most effective way to prevent substantial population declines in response to energy development is to set core habitat areas (including all seasonal habitat types) aside as a refuge from energy development. - Recent research on greater sage-grouse also suggests that it is necessary to limit the density of structures on the landscape, and the total amount of surface disturbance, in addition to prohibiting surface occupancy around leks and implementing seasonal timing limitations; in order to prevent significant declines in response to energy development. - In addition, research on greater sage-grouse suggests that placement of an oil and gas well within 3.9 miles of a lek results in significant impacts to leks and nesting habitat. - Declines in male greater sage-grouse lek attendance were reported within 3 km (1.9 mi) of a well or haul road with a traffic volume exceeding one vehicle per day (Holloran 2005, p. 40). 	<p>Currently the High Plains District is amending two RMPs while the Buffalo Field Office is revising their RMP. These projects are considering all current information for the Greater Sage-grouse.</p> <p>The BLM is in constant coordination with the High Plains District Sage Grouse Amendment Team and the Buffalo RMP Revision Team. Two parcels were found to be in conflict with alternatives within either of these projects and were deferred in Alternative B - the Proposed Action.</p> <p>See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.</p>
65	CNE	<p>The BLM doesn't summarize the recent science on impacts of energy development on sage-grouse in the EA, does not cite the relevant recent research in the EA, and clearly did not consider this substantial body of relevant and significant new information. As a result, the BLM's analysis of impacts and proposed lease stipulations and other mitigation measures are inconsistent with the best available science. This is also true of recent science on other relevant threats to greater sage-grouse discussed previously.</p>	<p>Since most of the relevant recent research involves development, see page 8, Section 1.6, for a discussion of development in relation to leasing. Development cannot be reasonably determined at the leasing stage and the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.</p>
66	CNE	<p>The BLM has failed to adequately consider the cumulative effects of the threats discussed previously and the overall human footprint on greater sag-grouse habitat and sage-grouse populations at a landscape scale. See further discussion under section later in this comment letter.</p>	<p>Since most of the relevant recent research involves development, see page 8, Section 1.6, for a discussion of development in relation to leasing. Development cannot be reasonably determined at the leasing stage and the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.</p>

67	CNE	The abundance of documents created to help protect the greater sage-grouse must be considered when finalizing this EA. The Colorado Division of Wildlife, the United States Fish and Wildlife Service, and the BLM have all published material recognizing the imperiled status of the greater sage-grouse and declaring that conservation minded actions are needed to ensure protection of this species. These mandates should be strongly considered by the BLM and fully incorporated into the final EA.	<p>Currently the High Plains District is amending two RMPs while the Buffalo Field Office is revising their RMP. These projects are considering all current information for the Greater Sage-grouse.</p> <p>The BLM is in constant coordination with the High Plains District Sage Grouse Amendment Team and the Buffalo RMP Revision Team. Two parcels were found to be in conflict with alternatives within either of these projects and were deferred in Alternative B - the Proposed Action.</p>
68	CNE	BLM has applied new standards for protecting greater sage-grouse from the impacts of energy development in Wyoming, based on the results of recent science on the impacts of oil and gas development on greater sage-grouse. It is our understanding that the following Wyoming BLM standards are now applied by BLM as the performance standard throughout sage-grouse range. BLM should be applying at least a 0.6 mile buffer in core areas. We would ask that this minimal buffer is applied to all parcels within core areas. These standards are the bare minimum standards that should be applied to protect greater sage-grouse from unavoidable adverse impacts of energy development, and are arguably still inadequate to prevent unavoidable adverse impacts.	<p>The RMP process is the only way to set this type of mitigation including the size of the Sage-grouse lek buffers that can be used. Currently the High Plains District is amending two RMPs while the Buffalo Field Office is revising their RMP. These projects are considering all current information for the Greater Sage-grouse.</p> <p>The BLM is in constant coordination with the High Plains District Sage Grouse Amendment Team and the Buffalo RMP Revision Team. Two parcels were found to be in conflict with alternatives within either of these projects and were deferred in Alternative B - the Proposed Action.</p>
69	CNE	The recent U.S. Fish and Wildlife Service finding regarding greater sage-grouse includes informative discussion of its status, threats, and the adequacy of the current management of greater sage-grouse on BLM and FS land (we hereby incorporate that document in our comments). Oil and gas development will be harmful to the species because it requires surface exploration, exploratory drilling, field development, and plant construction and operation. Once this species is listed critical habitat will be designated which will most likely include the area covered by these lease parcels. BLM should conference with FWS regarding the impacts of leasing this land on the greater sage-grouse. It would be irresponsible for BLM to approve such a project knowing that it may diminish habitat that is essential for the survival of this species. BLM's special status species requires BLM to work to conserve and recover special status species and work to reduce the need for listing under the Endangered Species Act.	The BLM received the USFWS comment memo regarding the August 2011 Oil and Gas lease sale. Their comments are included within this document.
70	CNE	The BLM should carefully consider how the management guidance outlined above should be applied in this situation. We suggest that BLM avoid leasing occupied greater sage-grouse habitat for energy development until the following steps have been taken: 1) the agencies have completed priority habitat mapping for greater sage-grouse as outlined in the new IM, 2) the agencies have conducted a Land Use Plan amendment that considers how best to conserve sage-grouse on a landscape scale, and includes alternatives that maximize the conservation of sagebrush habitat and exclude energy development from priority greater sage-grouse habitat, and 3) the U.S. Fish and Wildlife Service has complied with their listing obligations for the greater sage-grouse.	<p>The BLM is working on habitat mapping.</p> <p>The BLM considered deferring all parcels within Sage-grouse habitats. All parcels were analyzed through the Oil and Gas Leasing Screen for Greater Sage-grouse (IM WY-2010-013). Only parcels that fit all the the screening criteria were deferred. Other parcels were also deferred for other reasons such as cultural issues or in the case of the Buffalo Field Office all parcels within Sage-grouse Core Areas or Sage-grouse connectivity area were deferred due to the RMP revision.</p> <p>Actions of the USFWS are beyond the scope of this document.</p>
71	CNE	The BLM must consider a range of alternatives as part of the NEPA analysis of the proposed leasing. Federal regulations make clear that discussion of alternatives to the proposed action is "the heart" of the environmental impact statement. We do not feel that the alternatives that have been analyzed in the EA are sufficient to constitute full consideration of the impacts of the leasing and potential development, and adequate alternatives to adequately minimize and mitigate impacts. We ask that the NEPA analysis for this leasing consider a broader range of alternatives as previously described. It is very important that the range of alternatives allow the public to evaluate the trade-offs between the potential for development of energy resources in the area and impacts to greater sage-grouse and other sensitive resources, and evaluation of the broader range of alternatives outlined previously in this comment is necessary in order to adequately evaluate these trade-offs.	The BLM has analyzed a No Action Alternative, a Proposed Action Alternative consisting of deferring some parcels and offering for sale others and a Offer All Parcels for Sale Alternative. This range of alternatives is broad enough for the decisionmaker to make the informed decision he needs. The BLM does not see any benefit to adding alternatives that call out specific resources since the Proposed Action Alternative defers those resources that may be impacted.

72	CNE	The BLM failed to adequately analyze potential direct, indirect and cumulative impacts of the proposed leasing on greater sage-grouse in the EA. The lease parcels have a significant area of overlap with occupied greater sage-grouse habitat, including leks, brood areas, production areas, winter habitat and severe winter habitat.	See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.
73	CNE	In order to adequately analyze the environmental baseline and the direct, indirect and cumulative impacts of the proposed action in combination with other past, present and reasonably foreseeable actions, the BLM must take the following steps as part of NEPA analysis in an EIS:	This document is not an EIS, it is an EA. See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.
74	CNE	1) Delineate the appropriate spatial scales that must be considered for analysis of effects of management actions. BLM has failed to use appropriate spatial scales for its analysis of the direct effects of the proposed action....	See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.
75	CNE	...This should be the analysis area for consideration of direct impacts of the proposed action on nesting habitat. BLM has failed to consider the impacts to nesting habitat at an appropriate spatial scale. This is because BLM failed to consider the relevant information contained in scientific literature regarding sage-grouse populations.	See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed. Relevant new information and research is currently being analyzed in the six RMP amendments and other RMP revisions for the Greater Sage-grouse within the State.
76	CNE	Beyond the potential adverse impacts on nesting and brood-rearing habitat within 3-6.2 miles of leks, the most recent published scientific literature now makes clear that sage-grouse population persistence is directly influenced by landscape characteristics for distances up to 33.5 miles from a lek (Holloran and Anderson 2005, Walker et al. 2007, Johnson et al. 2009, Knick and Hanser 2009), and that landscape-scale effects also are significant in winter habitat selection by grouse (Doherty et al. 2008). There is no reasonable consideration by BLM of this larger spatial scale in their assessment of direct potential adverse impacts of the proposed action on the greater sage-grouse population. In fact, there is no evidence in BLM's environmental analysis that the agency even recognizes the potential for adverse impacts of its actions at these larger spatial scales. This is because BLM failed to consider the relevant new information contained in recent scientific literature regarding sage-grouse populations. BLM must consider impacts at an appropriate spatial scale .	See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time or scale. At the time of APD an analysis of this resource will be completed.
77	CNE	3) Correlate the amount of past habitat loss and fragmentation in the project area with known population trends and loss of historically active leks. Assess the degree to which past activities in the project area contributed to past population declines in this area.	See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts and especially cumulative impacts cannot be analyzed at this time. At the time of APD an analysis of this resource will be completed.
78	CNE	4) Determine the number of greater sage-grouse that the project area supported historically. Determine the degree to which restoration activities could restore habitat in the project area, and the number of birds that could be supported if the habitat in the area was restored to its former condition.	See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts and restoration activities cannot be determined at this time. At the time of APD an analysis of this resource will be completed.

79	CNE	5) determine the a) location, density and spatial distribution of surface facilities (e.g. powerlines, wells, etc.) that will be added to the project area as a consequence of the proposed action, b) the amount and spatial distribution of surface disturbance (e.g. roads, well pads etc.) that will result from the proposed action, and c) the amount of habitat that may be degraded or rendered unsuitable for sage-grouse as a consequence of indirect effects of proposed action (e.g. the amount of habitat likely to be invaded by noxious weeds, the amount of habitat that will be rendered unusable due to impacts of noise, the amount that will be avoided by sage-grouse due to proximity to new roads, well pads etc.). Using the best available science on the impacts of energy development on greater sage-grouse, predict how sage-grouse populations in the project area are likely to respond to this level of new infrastructure development and associated habitat loss, fragmentation and degradation.	See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.
80	CNE	6) determine the a) location, density and spatial distribution of surface facilities (e.g. power lines, wells, etc.) that will be added to the project area as a consequence of reasonably foreseeable future actions, b) the amount and spatial distribution of surface disturbance (e.g. roads, well pads etc.) that will result from reasonably foreseeable future actions, and c) the amount of habitat that may be degraded or rendered unsuitable for sage-grouse as a consequence of direct and indirect effects of reasonably foreseeable future actions (e.g. the amount of habitat that may be degraded by livestock grazing, vegetation treatments, etc., amount of habitat that will be rendered unsuitable by the indirect effects of infrastructure associated with other projects, including increased overgrazing of winter habitat by elk due to projects that reduce the total amount of winter habitat available, increase in predation, spread of noxious weeds, noise, avoidance of structures etc).	See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.
81	CNE	7) determine the cumulative a) location, density and spatial distribution of surface facilities, b) the amount and spatial distribution of surface disturbance, and c) the amount of habitat that may be degraded or rendered unsuitable for sage-grouse as a consequence of direct and indirect effects; that will result from the combination of past, present and reasonably foreseeable future actions in the both within the project area and at a appropriate landscape scale (see previous discussion under step 1 above).	See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.
82	CNE	8) Assess the potential impacts to sage-grouse at multiple spatial scales that are appropriate for understanding impacts, particularly whether cumulative impacts will exceed thresholds of tolerance for sage-grouse. Use the above information to determine the a) location, density and spatial distribution of surface facilities, b) the amount and spatial distribution of surface disturbance, and c) the amount of habitat that may be degraded or rendered unsuitable at the following spatial scales: - within 2 miles of each active, inactive and unknown lek within this project area - within 4 miles of each active, inactive and unknown lek in the project area - within 5.3 miles of each active, inactive and unknown lek in the project area - within 6.2 miles of each active, inactive and unknown lek in the project area - within each 640 acre block of land within the project area - within 33.5 miles of the project boundary.	The RMP process is the only way to set this type of mitigation including the size of the Sage-grouse lek buffers that can be used. Currently the High Plains District is amending two RMPs while the Buffalo Field Office is revising their RMP. These projects are considering all current information for the Greater Sage-grouse. The BLM is in constant coordination with the High Plains District Sage Grouse Amendment Team and the Buffalo RMP Revision Team. Two parcels were found to be in conflict with alternatives within either of these projects and were deferred in Alternative B - the Proposed Action. See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.
83	CNE	In addition, determine the a) location, density and spatial distribution of surface facilities, b) the amount and spatial distribution of surface disturbance, and c) the amount of habitat that may be degraded or rendered unsuitable with each of the seasonal habitat types in the project area and at an appropriate landscape scale; including brood areas, production areas, winter habitat and severe winter habitat.	See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.

84	CNE	9) Analyze whether mitigation measures proposed under each alternative are effective to mitigate the above impacts to insignificance. Consider whether the above information combined with the best available science (cite to section) suggests that different mitigation measures (e.g. a larger than 0.6 mi NSO/NGD buffer around leks, a cap on cumulative surface disturbance and density of structures, etc.), might more effectively minimize and mitigate impacts. Disclose unavoidable adverse impacts.	See page 12, Section 2.2, for a discussion of how stipulations are applied in the document. See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.
85	CNE	The cumulative effects analysis should include thorough analysis of the threats previously discussed in this comment, and cumulative impacts should be assessed in the context of the existing human footprint within greater sage-grouse habitat. Human-footprint models provide a spatial representation of human land uses and delineate both physical and ecological effects (Leu et al. 2008). The physical human footprint is the land surface occupied by anthropogenic features (e.g., agricultural lands, highways, power-line corridors, etc.). The ecological human footprint occurs where the physical human footprint influences ecological processes beyond its physical location. Leu and Hanser (2009) assessed the intensity of the human footprint across the ranges of the greater sage-grouse. The BLM must consider the impacts of the increase in the human footprint that will result from implementation of the proposed action as part of its cumulative effects analysis. In addition, BLM should use readily available GIS data on the extent of the human footprint in its assessment of the current baseline status of greater sage-grouse habitat. This is essential to adequate analysis of cumulative effects.	See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot be determined at this time. At the time of APD an analysis of this resource will be completed.
86	CNE	Analysis must also be conducted that considers the projects that have previously been approved in and around the project area. The Given the information outlined previously on threats to greater sage-grouse and the importance of understanding cumulative impacts, the BLM should clearly quantify the cumulative impacts that the proposed action and other past, present and reasonably foreseeable activities will have on the both the greater sage-grouse population. In assessing cumulative impacts, the BLM should clearly consider whether the project is consistent with BLM's stated goal of maintaining and increasing greater sage-grouse populations.	See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.
87	CNE	This analysis cannot be deferred till later stages in the process because it is essential to determining whether or not it is appropriate to lease the parcels, and if so, what stipulations must be applied to the lease to mitigate impacts to insignificance. This sage-grouse habitat has already been degraded through both BLM approved activity and activity on private land. However, the EA does not adequately analyze the cumulative impacts of these past, present and reasonably foreseeable future activities.	See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts and especially cumulative impacts cannot be analyzed at this time. At the time of APD an analysis of this resource will be completed.
88	CNE	The NEPA analysis should include a thorough description and analysis of the likely effectiveness of any proposed mitigation measures at mitigating impacts to greater sage-grouse. The BLM must evaluate the effectiveness of the mitigation measures used in leasing with the best available science. "The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA." 40 C.F.R. § 1500.1(b) (2009). "For this reason, agencies are under an affirmative mandate to 'insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements[,] identify any methodologies used and . . . make explicit reference by footnote to the scientific and other sources relied upon for conclusions[.]'" <i>Env'tl. Def. v. U.S. Army Corps of Eng'rs</i> , 515 F. Supp. 2d 69, 78 (D.D.C. 2007) (citing 40 C.F.R. § 1502.24 (2009)). This analysis should take into account the best available science on the impacts of energy development on greater sage-grouse, as well as the best available science on the status of and threats to greater sage-grouse. The NEPA analysis must acknowledge that the best available science suggests that the mitigation measures proposed in the EA will not prevent unavoidable adverse impacts to greater sage-grouse.	See page 12, Section 2.2, for a discussion of how stipulations are applied in the document. See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.

89	CNE	The NEPA analysis should include a thorough description and analysis of the likely effectiveness of any proposed mitigation measures at mitigating impacts to greater sage-grouse. This analysis should take into account the best available science on the impacts of energy development on greater sage-grouse, as well as the best available science on the status of and threats to greater sage-grouse. The NEPA analysis must acknowledge that the best available science suggests that the mitigation measures proposed in the EA will not prevent unavoidable adverse impacts to greater sage-grouse.	See page 12, Section 2.2, for a discussion of how stipulations are applied in the document. See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.
90	CNE	The proposed action in the EA calls for a 0.25 mile No Surface Occupancy (NSO) buffer around active leks (Exhibit G-9 of EA). A 0.25 mile buffer will not provide sufficient protection for the greater sage-grouse. As outlined previously in this comment, it has been shown that sage-grouse are negatively affected by disturbances up to 4 miles from the lek. The 0.25 mile buffer will allow activity too close in proximity to leks and will cause adverse impacts to breeding and nesting. Sage-grouse exhibit strong site fidelity to seasonal habitats, which include breeding, nesting, brood rearing, and wintering areas, even when the area is no longer of value. The NSO stipulation focuses on only leks and disregards the other seasonal habitats necessary for a healthy sage-grouse population. To ensure that nesting areas are also protected from disturbances resulting from this project the NSO buffer must be larger than 0.25 miles. We would request that the BLM analyze larger buffers to determine the feasibility of this leasing when considering the needs of the sage-grouse. BLM must also consider providing adequate protection to other seasonal habitat types.	<p>The RMP process is the avenue to set mitigation including the size of the Sage-grouse lek buffers and NSO. Currently the High Plains District is amending two RMPs while the Buffalo Field Office is revising their RMP. These projects are considering all current information for the Greater Sage-grouse.</p> <p>The BLM is in constant coordination with the High Plains District Sage Grouse Amendment Team and the Buffalo RMP Revision Team. Two parcels were found to be in conflict with alternatives within either of these projects and were deferred in Alternative B - the Proposed Action.</p> <p>See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.</p>
91	CNE	This NSO stipulation contains Exception, Modification, and Waiver Criteria that would allow for surface occupancy within this 0.25 mile buffer. These criteria all focus solely on protection of the lek and disregard the other essential habitat within the affected area. NSO stipulations should not contain exception, modification, and waiver criteria. The current exception, modification and waiver criteria will render BLM's the NSO stipulation ineffective and makes BLM's conclusion that this stipulation will mitigate impacts to insignificance arbitrary and capricious.	Stipulations for Oil and Gas Leasing are developed at the RMP stage. These stipulations cannot be changed unless done at that level through a Plan amendment or revision. Currently the Wyoming BLM is amending six RMPs throughout the state and this amendment is analyzing and developing lease stipulations for the Greater Sage-grouse. The other four plans are all going through RMP revisions that will address this issue.
92	CNE	Timing limitations should be implemented to protect important greater sage-grouse habitat during all time of the year. The stipulations in the EA only protect habitat from March 15 to July 15 to protect lekking grounds. However the EA fails to consider protections for other habitat at other times of the year. Winter habitat, nesting habitat, brood rearing habitat, and other essential habitat should also be protected during the pertinent times of the year.	<p>The RMP process is the avenue to set mitigation including the TLS and appropriate habitats. Currently the High Plains District is amending two RMPs while the Buffalo Field Office is revising their RMP. These projects are considering all current information for the Greater Sage-grouse.</p> <p>The BLM is in constant coordination with the High Plains District Sage Grouse Amendment Team and the Buffalo RMP Revision Team. Two parcels were found to be in conflict with alternatives within either of these projects and were deferred in Alternative B - the Proposed Action.</p>

93	CNE	<p>For the reasons outlined above, we ask that the BLM avoid leasing and development of occupied greater sage-grouse habitat, including mapped leks (including active, inactive and unknown leks), lands within 4 miles of leks, production habitat, brood rearing habitat, winter habitat, and severe winter habitat, and any other area known to be used by greater sage-grouse. Energy development within greater sage-grouse habitat is likely to have unacceptable impacts to greater sage-grouse. At a minimum, the proposed leasing should be deferred until the BLM has considered whether occupied greater sage-grouse habitat should be managed as a reserve and set aside from energy development through land use plan revisions, and until the U.S. Fish and Wildlife Service has the resources to fulfill their listing obligations and designate critical habitat for the species. This is necessary in light of recent peer-reviewed scientific studies addressing the impacts of energy development and other human activities on sage-grouse, increasing authorization of renewable energy development on public lands, the small numbers and continuing decline of greater sage-grouse, the scientific consensus that it is necessary to conserve large, intact, interconnected expanses of sagebrush habitat in order to conserve sage-grouse, and new management guidance.</p>	<p>The RMP process is the avenue to set mitigation including the size of the Sage-grouse lek buffers. Currently the High Plains District is amending two RMPs while the Buffalo Field Office is revising their RMP. These projects are considering all current information for the Greater Sage-grouse.</p> <p>The BLM is in constant coordination with the High Plains District Sage Grouse Amendment Team and the Buffalo RMP Revision Team. Two parcels were found to be in conflict with alternatives within either of these projects and were deferred in Alternative B - the Proposed Action.</p> <p>See page 8, Section 1.6, for a discussion of development in relation to leasing. Since development cannot be reasonably determined at the leasing stage, the impacts cannot realistically be analyzed at this time. At the time of APD an analysis of this resource will be completed.</p>
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