

**United States Department of the Interior
Bureau of Land Management**

**DRAFT Environmental Assessment
for the 2022 First Quarter Competitive Oil & Gas Lease Sale
Parcels in the BLM Kremmling, Little Snake, Royal Gorge, and White
River Field Offices
and
Parcels in the USDA Forest Service Pawnee National Grassland Office**

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1. INTRODUCTION

1.1 BACKGROUND

The Bureau of Land Management (BLM) Colorado State Office is holding a 2022 First Quarter Competitive Oil and Gas Lease Sale, for which it is considering parcels that were previously considered for competitive auction at the deferred 2021 First Quarter and Second Quarter lease sales. All parcels that were still under consideration at the time the sales were deferred are being considered for the 2022 First Quarter Lease Sale, with the exception of one parcel in the White River National Forest, which has been removed due to the expiration of the U.S. Forest Service's consent to leasing. Note that several 2021 First Quarter parcels had been deferred earlier in the leasing process, and were no longer under consideration at the time the sale was deferred; these include one parcel in the Kremmling Field Office (KFO), two full and two partial parcels in the Little Snake Field Office (LSFO), and ten parcels in the San Juan National Forest. These 2021 First Quarter deferred parcels are not considered in this environmental assessment (EA). This EA analyzes the potential effects of leasing parcels for potential oil and gas exploration and development. This analysis will be considered by the authorized officer to determine whether to prepare an environmental impact statement (EIS), and to decide whether to offer each parcel in the lease sale.

In Colorado, 119 parcels covering 141,675.22 acres of Federal minerals are proposed for the 2022 First Quarter Competitive Oil and Gas Lease Sale. See **Appendices A and B** for legal descriptions and stipulations. Of the total acres, 20 percent are on Federal surface land, 3 percent are on State surface land, and 77 percent are on private surface land in Jackson, Las Animas, Moffat, Rio Blanco, Routt, and Weld counties.

1.2 OIL AND GAS LEASING PROCESS

1.2.1 GENERAL

Various laws, including the Mineral Leasing Act of 1920 (MLA) and the Federal Land Policy and Management Act of 1976 (FLPMA), authorize the leasing of Federal mineral resources for development and production to meet the national, regional, and local needs. The BLM offers parcels of Federal minerals for lease through competitive oil and gas lease sales (auctions), in accordance with 43 CFR § 3120.1-2.

The BLM identifies lands that are open to ("eligible for") oil and gas leasing in its resource management plans (RMPs). During that planning process, the BLM also identifies stipulations that should be attached to future leases for the protection of other resource values and uses. Federal oil and gas leases have standard terms and conditions, and many include resource-specific stipulations consistent with the applicable RMP. As discussed in **Section 1.2.2**, Federal minerals that underlie National Forest System lands are subject to the planning decisions of the U.S. Department of Agriculture, Forest Service (USFS). Note that 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 BLM's land use planning process (i.e., during development of the BLM RMPs) or when the USFS either revises or amends Land and Resource Management Plans (LRMPs).

The BLM Colorado State Office conducts quarterly competitive sales to lease eligible and available oil and gas parcels. It accepts public expressions of interest (EOIs) in lands for potential leasing, and also may identify other lands appropriate for leasing consideration through internal review. The State Office reviews land and mineral ownership and existing leases in the vicinity of the lands of interest, identifies parcels for further leasing consideration, and sends a draft parcel list to the field offices that manage the lands where the parcels are located. The field offices review the applicable RMPs to verify whether the lands are open to leasing, and confirm the appropriate stipulations for each parcel, including those of

Controlled Surface Use (CSU), No Surface Occupancy (NSO), and Timing Limitation (TL). They also evaluate existing National Environmental Policy Act (NEPA) compliance documents (such as EISs prepared for RMPs), and any new information that may warrant additional analysis.

The BLM posts a list of the parcels online for public scoping, and considers any scoping comments when preparing the NEPA compliance documents for the lease sale – typically an EA but occasionally a determination of NEPA adequacy (DNA). The field offices undertake any appropriate consultation with other Federal and State agencies, and confer with cooperating agencies in the preparation of the NEPA compliance documents.

The EA or DNA may be posted online for public comment. The BLM reviews all public comments, and considers whether the EA or DNA should be modified in any way. The comments also are considered in making the final leasing decision. Prior to the lease sale, the Deputy State Director signs a decision that determines which parcels are available for leasing and will be offered for lease in the upcoming sale.

The BLM uses the NEPA analyses to evaluate the foreseeable potential effects of leasing, and to determine whether the Proposed Action would have significant impacts not already disclosed and analyzed in existing NEPA documents, warranting an EIS. The BLM may issue a “finding of no significant impact” (FONSI), or a “finding of no *new* significant impact” (FONNSI), if no such impacts are identified. If BLM reaches a FONSI/FONNSI, it may sign a decision record that approves the selected alternative, which could be the Proposed Action Alternative, the No Action Alternative, another action alternative, or a combination thereof.

Based on the NEPA review, the field offices make a leasing recommendation to the Colorado State Office, which publishes a Notice of Competitive Lease Sale (Sale Notice) that lists the parcels to be offered at the auction at least 45 days prior to the auction (43 CFR § 3120.4-2). Lease stipulations applicable to each parcel are specified in the Sale Notice.

The Sale Notice is posted on the BLM Colorado Oil and Gas Lease Sales website at: <https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/leasing/regional-lease-sales/colorado>.

Occasionally, the BLM may choose to defer or remove additional parcels prior to the day of the lease sale. In such cases, the BLM prepares an addendum to the Sale Notice.

Parcels offered but not receiving a bid at a lease sale remain available for a period of up to 2 years, and can be leased to any qualified lessee at the minimum bid cost. Parcels obtained in this way may be re-parceled by combining or deleting other previously offered lands. Mineral estate not leased within 2 years of an initial offering becomes unavailable for lease, but may be offered again after a new competitive lease sale review process.

The issuance of an oil and gas lease itself does not authorize any development or disturbance of the surface of leased lands, but such activity may be subsequently authorized by the BLM through approval of an application for permit to drill (APD) or other permit. NEPA analysis for a lease sale decision considers those impacts of potential future development that are reasonably foreseeable at the time of leasing, given existing information. While the BLM often can identify generalized impacts that are likely to result if a lease is developed in the future, many site-specific impacts are not foreseeable absent concrete development proposals that identify the precise location, timing, access needs, infrastructure, and equipment associated with a proposed development project. This information ordinarily is described in an APD.

A lessee has the right to use as much of the leased lands as necessary to explore and drill for all the oil and gas within the lease boundaries, subject to the lease stipulations, restrictions derived from specific nondiscretionary statutes, and other reasonable measures to minimize adverse impacts to other resource values, land uses, or users. See 43 § CFR 3101.1-2. Those measures must conform with the applicable RMP, and cannot conflict with the rights granted in the lease. However, reasonable measures may include modification of the site or design of proposed facilities, timing of operations, and particular reclamation practices. See 30 U.S.C. § 226(g); 43 CFR § 3101.1-2. See also Yates Petroleum Corp., 176 IBLA 144 (2008). If the BLM receives an APD for a lease, it conducts additional NEPA analysis to consider site-specific impacts of the proposal, before deciding whether to approve the APD, and what conditions of approval (COAs) are needed to protect other resource values and uses. See 43 CFR § 3162.5-1(a). Upon cessation of lease operations, the BLM's regulations and the terms of the lease require the lessee to plug the well(s) and properly abandon any facilities on the lease. The surface must be reclaimed to the satisfaction of the BLM authorized officer, in accordance with Onshore Oil and Gas Order No. 1.

Oil and gas leases are issued for a 10-year primary term, and continue for so long thereafter as oil or gas is produced in paying quantities. See 43 CFR § 3107.2. Many leases are never drilled, or fail to produce oil and gas in paying quantities, and thus expire at the end of the primary term.

1.2.2 NATIONAL FOREST SYSTEM LANDS – PAWNEE NATIONAL GRASSLAND

If the USFS has identified National Forest System lands as available for oil and gas leasing, the BLM may offer them in competitive lease sales. The USFS identifies available lands and specifies appropriate stipulations for the protection of other resources and values in its LRMPs. In accordance with 30 U.S.C. § 226(h) and 43 CFR § 3101.7-1, the BLM leases National Forest System lands only with the consent of the USFS. Prior to offering such lands for leasing, the BLM confirms that the USFS consents to leasing the parcels with the associated stipulations.

The governing LRMP for the PNG was amended through the PNG Final Environmental Impact Statement (FEIS). The BLM participated as a cooperating agency in the preparation of the PNG FEIS, in accordance with 40 CFR § 1501.6. The PNG FEIS examined the impacts of oil and gas leasing on lands in the PNG and analyzed stipulations for the protection of other resources and uses. The USFS signed a Record of Decision (ROD) for the FEIS in 2015. In accordance with 40 CFR § 1506.3, the BLM has previously adopted the PNG FEIS for the purposes of issuing oil and gas leases and approving operations on lands within the PNG. Portions of this EA tier to the analyses in the PNG FEIS.

Members of the public have submitted EOIs to the BLM for oil and gas leasing on certain lands within the PNG. The USFS has reviewed the EOIs, determined leasing availability from the LRMP, as amended by the 2015 ROD for the Pawnee National Grassland Oil and Gas Leasing Analysis FEIS, and identified the appropriate stipulations for each parcel. On February 19, 2020, the USFS informed the BLM that it consents to lease of these lands with applicable stipulations, and BLM is considering these five parcels (1,522.56 acres) for the 2022 Lease Sale.

1.3 PURPOSE AND NEED

The purpose and need for the Proposed Action is to respond to EOIs to lease specific parcels of land for exploration and development of Federal oil and gas resources, consistent with BLM's authority under the MLA and FLPMA. The MLA establishes that the Secretary of the Interior may lease, to qualified bidders, lands known or believed to contain oil or gas deposits owned by the U.S. See 30 U.S.C. § 226. The policies set forth in the FLPMA include management in recognition of "the Nation's need for domestic sources of minerals." See 43 U.S.C. § 1701(a)(12).

1.4 DECISION TO BE MADE

The BLM will decide whether to lease all, some, or none of the proposed parcels at the 2022 Competitive Oil and Gas Lease Sale. The BLM also will decide the appropriate stipulations to attach to the parcels based on the applicable RMPs and USFS LRMP, and whether the stipulations should be applied to all lands in the parcels or to specific portions.

1.5 PLAN CONFORMANCE REVIEW

The alternatives evaluated in this EA conform with the following approved L/RMPs (43 CFR § 1610.5-3) and RODs for the applicable planning areas:

BLM Office: KFO

Name of Plan: Kremmling Field Office Record of Decision and Approved Resource Management Plan (KFO ROD/RMP) as amended by the Northwest Colorado Greater Sage-Grouse Approved Resource Management Plan Amendment (GRSG ARMPA)

Date Approved: June 2015, amended September 2015

Pertinent Decisions: The 2015 KFO ROD/RMP designated approximately 590,000 acres of Federal mineral estate open for continued oil and gas development and leasing, including the KFO lands included in the Proposed Action. Approximately 390,600 acres in the KFO were analyzed in the North Park Master Leasing Plan (MLP). This resulted in approximately 376,600 acres of the North Park MLP analysis area open to oil and gas leasing and development. The RMP also describes specific stipulations that would be attached to new leases offered in certain areas.

BLM Office: LSFO

Name of Plan: Record of Decision and Approved Resource Management Plan for Public Lands Administered by the Bureau of Land Management Little Snake Field Office, Craig, Colorado (LSFO ROD/RMP) as amended by the Northwest Colorado GRSG ARMPA

Date Approved: October 2011, amended September 2015

Pertinent Decisions: The 2011 LSFO RMP designated approximately 1.7 million acres of Federal mineral estate open for continued oil and gas development and leasing, including the LSFO lands of the Proposed Action. The RMP also describes specific stipulations that would be attached to new leases offered in certain areas.

BLM Office: Northwest District (NWD)

Name of Plan: Northwest Colorado Greater Sage-Grouse Approved Resource Management Plan Amendment (GRSG ARMPA)

Date Approved: September 2015

Pertinent Decisions: Objective MR-1: Manage fluid minerals to avoid, minimize and compensate for: 1) direct disturbance, displacement or mortality of GRSG; 2) direct loss of habitat or loss of effective habitat through fragmentation; and 3) cumulative landscape-level impacts. Priority will be given to leasing and development of fluid mineral resources, including geothermal, outside of priority habitat management areas (PHMA) and general habitat management areas (GHMA). When analyzing leasing and authorizing development of fluid mineral resources, including geothermal, in PHMA and GHMA, and subject to applicable stipulations for the conservation of GRSG, priority will be given to

development in non-habitat areas first and then in the least suitable habitat for GRSG. The implementation of these priorities will be subject to valid existing rights and any applicable law or regulation, including, but not limited to, 30 USC 226(p) and 43 CFR, Part 3162.3-I(h).

BLM Office: Royal Gorge Field Office (RGFO)

Name of Plan: Record of Decision for Northeast Resource Management Plan (Northeast ROD/RMP), as amended by the Record of Decision for the Oil and Gas Plan Amendment to the Northeast Resource Management Plan

Date Approved: September 1986, amended December 1991

Pertinent Decisions: 672,000 acres of BLM-administered mineral estate within the Northeast Planning Area are open to oil and gas leasing and development, subject to the lease terms and applicable lease stipulations.

BLM Office: RGFO

Name of Plan: Record of Decision for the Royal Gorge Resource Area Approved Resource Management Plan (RGRA ROD/RMP)

Date Approved: May 1996

Pertinent Decisions: BLM administered mineral estate is open to fluid minerals leasing, exploration and production, subject to the lease terms and applicable lease stipulations.

BLM Office: White River Field Office (WRFO)

Name of Plan: White River Record of Decision and Approved Resource Management Plan, as amended by the White River Field Office Record of Decision and Approved Resource Management Plan Amendment for Oil and Gas Development (WRFO RMPA) and as amended by the Northwest Colorado GRSG ARMPA

Date Approved: July 1997, amended August 2015 and September 2015

Pertinent Decisions: The 2015 WRFO RMPA designated approximately 2.2 million acres of Federal mineral estate open for continued oil and gas development and leasing, including the WRFO lands in the Proposed Action. The RMP (with associated amendments) also describes specific stipulations that would be attached to new leases offered in certain areas.

Consistent with 30 U.S.C. 226(h), the USFS is responsible for planning-scale leasing availability decisions for National Forest System lands. The USFS has designated the lands under consideration in this EA as open to oil and gas leasing, subject to particular stipulations, in the following LRMP and leasing availability decision.

USFS Office: Arapaho and Roosevelt National Forests and PNG

Name of Plan: Record of Decision for the Pawnee National Grassland Oil and Gas Leasing Analysis (PNG ROD)

Date Approved: February 2015

Pertinent Decisions: Nearly all Federal unleased lands on the PNG are available for oil and gas leasing (approximately 100,000 acres), subject to a NSO stipulation on any future Federal leases. The NSO stipulation prohibits wells and well pads from being located on these lands.

1.6 TRIBAL CONSULTATION

Consultation with potentially interested Native American Tribes is ongoing. Many Tribal offices are closed or operating at limited capacity due to restrictions imposed by the ongoing COVID-19 pandemic. This has caused delays in consultation responses. The BLM will continue efforts to consult with Tribes and understand potential concerns prior to issuing leases. The BLM will consider all communications received from Tribes throughout the NEPA analysis of the proposed lease sale. For any lease that is sold and issued, the BLM will re-initiate consultation upon receipt of any site-specific development proposal.

The field offices sent consultation letters by certified mail and emails, and placed phone calls, to Native American Tribes as shown in **Table 1**. No initial Tribal concerns specific to any parcel have been identified in the NWD (KFO, LSFO, or WRFO).

The RGFO (Rocky Mountain District) has received expressions of concern from many of the Tribes consulted, and is reviewing the issues raised in those communications. However, not all of the Tribes have yet responded or concluded their responses.

Table 1. Tribal Consultation Dates			
Field Office(s)	Tribes Consulted	Date of Consultation	Response Received
KFO, LSFO, and WRFO	The Ute Indian Tribe of the Uintah & Ouray Reservation, the Southern Ute Indian Tribe, the Ute Mountain Ute Tribe, the Northern Arapaho Tribe, and the Eastern Shoshone Tribe	9/13/2021	Requests for ongoing consultation should any lease be sold and subject to future site-specific development proposals.
RGFO	Apache Tribe of Oklahoma, Cheyenne and Arapaho Tribes of Oklahoma, Cheyenne River Sioux Tribe, Comanche Nation of Oklahoma, Crow Creek Sioux, Eastern Shoshone, Jicarilla Apache Nation, Kiowa Tribe of Oklahoma, Northern Arapaho Tribe, Northern Cheyenne Tribe, Ute Indian Tribe of the Uintah & Ouray Reservation, Oglala Sioux Tribe, Pawnee Tribe, Rosebud Sioux Tribe, Southern Ute Tribe, Standing Rock Lakota Tribe, and the Ute Mountain Ute Tribe	Ongoing (initiated on 9/8/21)	Numerous Tribes expressed concerns about the parcels located in Las Animas County and the PNG. The BLM is continuing to engage with and respond to the Tribes.

1.7 PUBLIC PARTICIPATION

1.7.1 SCOPING

The principal goal of scoping is to identify issues and alternatives that may require detailed analysis. The BLM uses both internal and external scoping to identify potentially affected resources and associated issues. Internal scoping was conducted through discussions among an interdisciplinary team of resource specialists.

An external scoping process gave the public an opportunity to identify potential issues related to the parcels under consideration. The BLM posted a list of the parcels with their respective stipulations, an interactive map, and GIS shapefiles on ePlanning (DOI-BLM-CO-0000-2021-0005-OTHER_NEPA) from August 31, 2021, to October 1, 2021.

The BLM sent letters to non-Federal surface owners whose land overlies Federal minerals proposed for leasing. The BLM also sent notification letters to Federal, State, and local agencies, organizations, and representatives (**Section 4**).

The BLM WRFO sent an informational letter to the Colorado State Historic Preservation Office (SHPO) on October 12, 2021, on behalf of the NWD (KFO, LSFO, and WRFO). The SHPO raised no concerns specific to any lease parcel proposed for sale in the NWD. With the use of stipulations designed to protect cultural resources on all lands associated with the proposed lease sale, the NWD proposed a finding of *no adverse effect* as defined in 36 CFR 800.5(b).

The BLM RGFO (Rocky Mountain District) is addressing Tribal concerns and reviewing new archaeological information for the area prior to initiating consultation with the SHPO. The RGFO will initiate and complete the Section 106 consultation process before offering any parcel for lease.

The BLM Colorado State Office received a total of 151 scoping comments, comprising 34 scoping comments from individuals, 95 from citizen groups' form-letter campaigns (including one letter with approximately 19,900 individual form letters), 13 from environmental organizations, 1 from local industry representatives, and 8 from governmental entities. Scoping comments expressed concerns related to a variety of resource-related issues, including air resources, greenhouse gas (GHG) emissions and climate change, cultural resources, fisheries, geology, historic areas, land health, plants, recreation, renewable energy, special conservation considerations (e.g., Areas of Critical Environmental Concern [ACECs], conservation easements and lands with wilderness characteristics [LWCs]), visual resources, waste management, water resources, wildfire, wild horses, and wildlife (e.g., big game and Greater sage-grouse [GRSG]). Scoping comments also expressed concerns related to a variety of policy and procedure-related issues, including fluid mineral leasing in general, public participation, Tribal consultation, environmental justice, public health and safety, and socioeconomics.

In addition, since parcels originally considered for the March 2021 and June 2021 lease sales are proposed for inclusion in the 2022 First Quarter Lease Sale, previous public scoping comments on the 2021 lease sales were also considered. The 15-day scoping comment period for the March 2021 proposed lease sale opened on October 2, 2020, and closed on October 16, 2020. During this public scoping period, the BLM received eight comment submissions regarding parcels in the NWD, and ten letters regarding parcels in the RGFO.

The 15-day scoping comment period for the June 2021 proposed lease sale opened on December 29, 2020, and closed on January 13, 2021. The BLM received 16 comment submissions (one letter from a Federal agency, 3 letters from State government, 3 letters from national non-profit organizations, and 8 letters from private individuals).

The scoping comments for the March 2021 and June 2021 lease sales expressed concerns related to public involvement in the planning process, aquatic wildlife and water quality, groundwater, air quality and climate, environmental toxins, public health and safety, wildlife and habitats, wilderness areas, market conditions as they relate to drilling, cultural resources, and adherence to environmental laws.

The BLM considered the issues identified during internal and external scoping. Although many issues may arise during scoping, not all of the issues raised warrant analysis in an EA. Issues are analyzed if 1) an analysis of the issue is necessary to make a reasoned choice between alternatives, or 2) if the issue is associated with a significant impact, or where analysis is necessary to determine the significance of the impact.

In consideration of both internal and external scoping, the BLM is considering an alternative of leasing a portion of the parcels, and would defer the majority of the proposed parcels due to GRSG, big game, and ongoing Tribal consultation.

Issues that were determined to require further analysis are discussed in **Section 1.7.2**. **Section 1.7.3** identifies the issues the BLM has concluded do not require additional analysis, and the rationale behind each determination.

1.7.2 ISSUES ANALYZED IN DETAIL

Table 2. Issues Analyzed in Detail		
Issue	Issue Statement	Applicable Office
Air Resources – Air Quality Related Values	How would leasing potentially affect air quality related values?	All (KFO, LSFO, RGFO, WRFO, and PNG)
Air Resources – GHG Emissions and Climate Change	How would future potential development of proposed lease parcels contribute to GHG emissions and climate change?	All (KFO, LSFO, RGFO, WRFO, and PNG)
Cultural Resources ¹	How would leasing potentially affect cultural resources?	RGFO and PNG
Environmental Justice	Would leasing disproportionately or adversely affect environmental justice populations?	All (KFO, LSFO, RGFO, WRFO, and PNG)
Native American Religious Concerns	How would leasing potentially affect Native American religious concerns or places of traditional cultural importance?	All (KFO, LSFO, RGFO, WRFO, and PNG)
Socioeconomic Conditions	How would leasing potentially affect the socioeconomics where leasing would occur?	All (KFO, LSFO, RGFO, WRFO, and PNG)
Visual Resources ¹	How would leasing potentially affect visual resources?	RGFO
Wildlife – Big Game	How would leasing potentially affect big game migration corridors and winter range where leasing would occur?	KFO, LSFO, RGFO, and WRFO
Wildlife – Greater Sage-Grouse	How would leasing potentially affect Greater sage-grouse habitat?	KFO, LSFO, and WRFO
Wildlife – Migratory Birds	How would leasing potentially affect migratory bird nesting and habitat?	KFO, LSFO, RGFO, and WRFO
Wildlife – Raptors ¹	How would leasing potentially affect raptor nesting?	RGFO
Wildlife – Special Status Species ¹	How would leasing potentially affect special status species and their habitat?	RGFO
¹ Stipulations in conformance with the NWD (KFO, LSFO, and WRFO) RMPs have been applied to applicable parcels to minimize or eliminate impacts to the following resources, which will not be analyzed in detail (See Section 1.7.3 and Appendices A and B): Cultural Resources, Visual Resources, Wildlife-Raptors, Wildlife-Special Status Species.		

1.7.3 ISSUES CONSIDERED BUT NOT ANALYZED IN DETAIL

The EISs for the applicable RMPs and LRMP contained analyses of the reasonably foreseeable effects of oil and gas leasing and development in the planning areas. Those analyses addressed many of the issues identified during scoping. In addition to the control of impacts achieved through lease stipulations (including, for many resources, the NSO stipulation on all PNG lands), the analyses in the EISs accounted for regulatory requirements and project-specific conditions of approval that can be applied to control the adverse effects of activities at the development stage; many of these are noted below. For many resource issues, no information allowing for more detailed analysis will be available until a specific development project is proposed by an operator. Based on a review of the available information, existing analyses, required stipulations, and public scoping, the interdisciplinary team determined that the potential issues listed in **Table 3** are unlikely to be affected by any of the alternatives in ways not previously considered by the BLM and USFS in the EISs, and further analysis is not necessary to make a reasoned choice between the alternatives. Therefore, the potential issues listed in **Table 3** were considered, but not analyzed in detail. The NSO stipulation on leases in the PNG would eliminate potential impacts to many of the resources addressed in **Table 3**; for this reason, the PNG is not discussed separately.

Table 3. Issues Considered but Not Analyzed in Detail	
Program Area	Rationale
Aquatic Wildlife	<p>Parcels that are likely to have aquatic wildlife habitat have the following stipulations to provide protection for those habitats: CO-28, KFO-NSO-05, KFO-CSU-04, LS-NSO-105, WR-NSO-17, WR-CSU-11 and/or WR-CSU-12. Due to this, along with standard lease terms, regulations, required stormwater permitting, and applicable site-specific design features, COAs, and best management practices (BMPs) that would be applied at the APD stage, impacts to these resources are expected to be minimized or eliminated if these parcels are developed. Additionally, standard lease terms allow the BLM to require moving proposed locations up to 200 meters to avoid impacts to resources from proposed development.</p> <p>See the water resource section for water quality protections.</p>
Conservation Areas	<p>This subject specifically pertains to the Bruno Canyon, Purgatoire Canyon, and Purgatoire Prairie Potential Conservation Areas (PCAs), which are located in the RGFO. The Beaver Slide Draw, Shell Creek, Lookout Mountain, Racetrack Flat to Sevenmile Draw, and Fonce Flat Potential Conservation Areas are located in the LSFO.</p> <p>The PCA designation is determined by the Colorado Natural Heritage Program (CNHP), and has no association with the BLM. PCA designations highlight areas in the state contributing to Colorado’s biological diversity, often including natural plant communities or other associated elements of biodiversity. The BLM does not offer any specific protections to CNHP designated PCA locations.</p>
Cultural Resources	<p><u>NWD</u>: The WRFO, LSFO, and KFO have determined that the March 2021 lease sale would have “no adverse effect” to historic properties as defined in 36 CFR 800.5(b).</p> <p>No new physical or visual impacts would occur to the landscape as leasing itself does not involve ground disturbance. However, future activities related to lease exploration and development could have the potential to adversely affect properties protected under the National Historic Preservation Act (NHPA). If a lease is sold, additional NEPA analysis would be completed prior to the BLM approving any surface-disturbing activity. The BLM would require Class III (completely pedestrian) cultural resource inventories prior to surface-disturbing development proposals, including the approval of APDs. The BLM’s standard cultural program procedure is to avoid all</p>

Table 3. Issues Considered but Not Analyzed in Detail

Program Area	Rationale
	<p>sites; operators would work with the BLM to attempt to redesign planned development to avoid any known historic properties by at least 328 feet (100 meters). In addition, the BLM could apply conditions of approval (COAs) to protect cultural resources, which may affect or limit oil and gas development. Through Tribal consultation, such measures may include COAs to mitigate visual and audible impacts to sensitive cultural sites. The KFO, LSFO, and WRFO parcels partially overlap with previous Class III cultural inventories that have identified sensitive cultural resources. All parcels retain the potential for containing unidentified historic properties.</p> <p>The following stipulation and lease notice (LN) would apply to each parcel to protect cultural resources: CO-39 would apply to all lands and KFO-LN-5 would also apply to the KFO parcel.</p>
Farmlands, Prime & Unique	Generally foreseeable effects of development were sufficiently considered in the RMP EISs. The BLM will complete more detailed analysis if it receives a site-specific development proposal, and COAs may be attached, as appropriate.
Fire & Fuels	Generally foreseeable effects of development were sufficiently considered in the RMP EISs. The BLM will complete more detailed analysis if it receives a site-specific development proposal, and COAs may be attached, as appropriate.
Forest Management	Generally foreseeable effects of development were sufficiently considered in the RMP EISs. The BLM will complete more detailed analysis if it receives a site-specific development proposal, and COAs may be attached, as appropriate.
Geology/Minerals	<p>Generally foreseeable effects of development were sufficiently considered in the RMP EISs. The BLM will complete more detailed analysis if it receives a site-specific development proposal, and COAs may be attached, as appropriate. Mineral resources are evaluated at the APD stage, when the BLM has site-specific engineering and geologic information from a development proposal and considers impacts of specific drilling proposals on fluid and solid minerals.</p> <p>Parcels 6198 and 6199 are located within the Slater Lake Ranch Conservation Easement issued by Colorado Parks and Wildlife (CPW). According to patents issued for these lands under the Stock Raising Homestead Act of 1916 and the Homestead Act of 1862, the Federal government retained the right to access the Federal minerals. The LSFO RMP applies necessary restrictions for the protection of other resources while allowing the continued development of mineral resources in accordance with the MLA.</p>
Hydraulic Fracturing	<p>The BLM does not anticipate adverse impacts to surface or subsurface resources as a result of hydraulic fracturing, which has been used in thousands of wells in Colorado across several decades. This conclusion is based on the following:</p> <p>The process of hydraulic fracturing during well completions results in the inducement of microseismicity due to pressures generated that result in fracturing of the surrounding bedrock as a method to enhance recovery of hydrocarbons. However, these microseismic events are normally not detectable at the surface (except by geophysical instruments) or, if felt, are not at a magnitude to cause damage to structures or to trigger slope failure. With very few exceptions, the incidence of felt earthquakes is not related to hydraulic fracturing but to disposal of flowback fluids and produced water in deep disposal wells. Both Federal and private disposal wells in Colorado are regulated by the Colorado Oil and Gas Conservation Commission (COGCC), under its delegated authority from the U.S. Environmental Protection Agency (EPA), with regard to location, injection depth, injection pressure, injection rate, and total injected volume. The restrictions are specifically intended to avoid or</p>

Table 3. Issues Considered but Not Analyzed in Detail

Program Area	Rationale
	<p>minimize the risk of felt earthquakes, and of earthquake-related damage.</p> <p>Documented occurrences of contamination of water resources due to use of this technology are also rare, even at a national level. This very low incidence reflects the careful review of drilling and completion plans for proposed wells by both the BLM and State petroleum engineers and advances in engineering protections that have accompanied use of this technology. These include isolating the well bore from all but the targeted hydrocarbon-bearing zones with cement and providing further isolation from freshwater or other usable aquifers with the use of additional surface casing around the well bore. Surface casing extends below the depth of any freshwater aquifers that could support a human use or connect to surface waters.</p> <p>The geologic regions where the proposed current parcels are located are characterized by target formations thousands of feet below the ground surface and thousands of feet below freshwater and surface waters, minimizing the potential impacts of these usable waters by hydraulic fracturing in the region. In addition, the BLM requires compliance with the State’s requirements for collection and analysis of groundwater baseline samples and subsequent multi-year monitoring samples from up to four domestic wells within a 0.5-mile radius of a proposed oil and gas well, multi-well pad, and dedicated disposal well. The State also requires operators to monitor the well’s bradenhead pressure during hydraulic fracturing and to report promptly to the COGCC any significant pressure increase. Monitoring these pressures helps to indicate if hydraulic fracturing fluids have escaped the target formation.</p> <p>Regarding chemicals used in hydraulic fracturing, some of these are consumed during the process, and portions that return to the surface in flowback fluids and produced fluids are present at low concentrations. Once at the surface, a variety of operational and technological requirements imposed by the BLM and the State are designed to avoid or minimize the risk of exposure of these chemicals to human and environmental receptors while being stored, transported, or disposed.</p> <p>See the surface and ground water section for water quality protections.</p>
Invasive Plants	Generally foreseeable effects of development were sufficiently considered in the RMP EISs. The BLM will complete more detailed analysis if it receives a site-specific development proposal, and COAs may be attached, as appropriate. At the APD stage, the BLM will review site-specific vegetation conditions and will require the operator to implement BMPs to prevent weeds and control them if present on site.
Lands & Realty	Generally, foreseeable effects of development were sufficiently considered in the RMP EISs. The BLM will complete more detailed analysis if it receives a site-specific development proposal, and COAs may be attached, as appropriate.
National Historic Trails	There are no National Historic Trails present on any of the parcels.
North Park Master Leasing Plan (MLP)	A scoping comment noted that proposed parcel 5985 is in the North Park MLP area. The KFO RMP adopted the North Park MLP. This plan closed approximately 14,000 acres of Federal mineral estate from exploration and development of oil and gas. The remaining 376,600 acres of the MLP-area Federal minerals are open to oil and gas leasing and development. When the KFO RMP was approved in 2015, there were approximately 126,200 acres (roughly 33.5 percent of the MLPs leasable acres) of authorized Federal oil and gas leases. As of September 2020, 73,800 acres (19.6 percent) of Federal mineral estate are leased within the North Park MLP. The 200 acres of proposed lease sale would represent an increase of authorized leased acreage within the MLP of less than 0.3 percent. The BLM would apply resource-specific

Table 3. Issues Considered but Not Analyzed in Detail

Program Area	Rationale
	<p>leasing stipulations consistent with the RMP and MLP to each future lease within this area. None of the identified lease parcels occur within those areas designated as closed to fluid mineral leasing.</p>
<p>Oil and Gas leasing under FLPMA</p>	<p>The BLM is following the decisions in the current L/RMPs. See Section 1.5 of this EA. The March 2021 Lease Sale EA complies with FLPMA as stated in Sec 302. [43 U.S.C 1732] (a): “The Secretary shall manage public lands under principles of multiple use and sustained yield, in accordance with the land use plans developed by him under Section 202 of this Act when they are available, except that where a tract of such public land has been dedicated to specific uses according to any other provisions of law it shall be managed in accordance with such law.” The BLM has prepared the EA in accordance with NEPA, to consider new information that has become available since completion of the RMP EISs.</p>
<p>Paleontological Resources</p>	<p>Stipulations or Lease Notices have been applied to each lease parcel to provide the mitigation deemed necessary to avoid or minimize environmental harm to fossil resources relative to each field office. COAs would be added during the APD review if the BLM determines that mitigation is necessary to avoid or minimize impacts to paleontological resources.</p> <p>Appropriate parcels (21 of 23) have LN CO-29 to alert the lessee of a paleontological inventory requirement, and one KFO parcel has KFO-CSU-14 to protect the resource.</p>
<p>Public Health & Safety</p>	<p>Oil and Gas leasing does not in itself affect public health and safety. However, if the leases are to be explored and if operations are proposed for any of the subject lease parcels, the BLM will complete a site-specific NEPA analysis of the proposal(s) utilizing the best available and most current data. That NEPA analysis would address proposed activities and may result in general and site-specific COAs to minimize project-specific health and safety impacts.</p> <p>In addition, the Onshore Orders require that operators design and conduct drilling, completion, and production activities in a way that considers human health and safety.</p> <p>Also see the waste and water resource sections.</p>
<p>Recreation</p>	<p>The alternatives considered in the RMP EISs, and selected as the approved RMPs, reflect the multiple use policies set forth in FLPMA. The BLM has implemented those policies by evaluating the lands proposed for leasing, confirming that they are open for leasing under the RMPs, and applying stipulations consistent with the RMPs to protect known resources.</p> <p>Parcel 244 is partially within the area identified by the LSFO 2010 RMP/ROD as being the Fly Creek Special Recreation Area. The designation allows for management of its backcountry distinction due to the limited access to the area. The LSFO 2010 RMP/ROD identifies the area as Visual Resource Management (VRM) Class III and open to oil and gas leasing. Proposed lease parcels within the RGFO are mostly on private lands.</p> <p>It is unknown when, where, how, or if future surface disturbing activities associated with oil and gas exploration and development, such as well sites, roads, facilities, and associated infrastructure, would be proposed. It is also not known how many wells, if any, would be drilled and/or completed, the types of technologies and equipment would be used, and the types of infrastructure needed for production of oil and gas. At</p>

Table 3. Issues Considered but Not Analyzed in Detail

Program Area	Rationale
	the APD stage, potential impacts to recreation would be evaluated and mitigated, as necessary.
Riparian Zones & Wetlands	Parcels that are likely to have riparian zones and/or wetlands have stipulations to protect these resources. Stipulations CO-28, KFO-NSO-05, KFO-CSU-04, LS-NSO-105, WR-CSU-11 and/or WR-CSU-12 are applied to protect these resources. These stipulations, along with standard lease terms, regulations, required stormwater permitting, and applicable site-specific design features, and COAs and BMPs that could apply at the APD stage, impacts to these resources are expected to be minimized or eliminated if these parcels were developed.
Soils	Generally foreseeable effects of development were sufficiently considered in the RMP EISs. BLM will complete more detailed analysis for a site-specific development proposal. State stormwater regulations will apply to any development.
Vegetation -- Threatened, Endangered, and Sensitive Plant Species	Generally foreseeable effects of development were sufficiently considered in the RMP EISs. The BLM will complete more detailed analysis if it receives a site-specific development proposal, and COAs may be attached, as appropriate. At the APD stage, the BLM will review site-specific vegetation conditions and will require reclamation, including successful revegetation, as appropriate. If potential effects on a Federally listed plant species are identified during the site-specific review, then BLM would engage in Section 7 Consultation with the FWS.
Visual	<u>NWD</u> : The proposed lease parcels lie in lands managed with VRM Class II, III, and IV objectives, and private surface, which allows for varying levels of development. Visual resource stipulations have been applied to all parcels. The BLM will review site-specific information about proposed development activities and site-specific design features at the APD stage, and will require or recommend BMPs as applicable, depending on surface land ownership, the VRM class, and the proposal's potential to affect visual resources.
Wastes, Hazardous or Solid	<p>Waste management is evaluated at the APD stage. The BLM requires compliance with applicable State and Federal pollution control laws.</p> <p>Permits are also reviewed under COGCC rules, which establish regulatory standards and guidelines for the use, storage, transport, and disposal of wastes throughout the life of the oil and gas exploration and development phases.</p> <p>Many of the wastes generated during exploration and production of oil and gas resources are exempt from the Resource Conservation and Recovery Act (RCRA) Subtitle C hazardous waste regulation (e.g., produced water, produced gas). However, the exemption does not mean that these wastes present no hazard to human health and the environment, nor does the exemption relieve the operator from corrective action to address release of exempt wastes. Non-exempt wastes, such as lubricants, fuels, caustics or acids, and other chemicals would be used during exploration and production activities.</p> <p>Per- and polyfluoroalkyl substances (PFAS) are a group of synthetic chemicals used in numerous industries. In oil and gas exploration and development, they are typically found in aqueous film forming foam (AFFF) fire sprays, hydraulic oils used to prevent corrosion, and surfactants (compounds used to lower surface tension between two liquids), and PFAS can be used to increase production in oil reservoirs.</p> <p>Technologically enhanced naturally occurring radioactive material (TENORM) is also found in a number of waste streams (e.g., scrap metal, sludge, slags) and includes materials such as radon and radium. In oil and gas exploration and development, these</p>

Table 3. Issues Considered but Not Analyzed in Detail

Program Area	Rationale
	<p>materials are typically found in specific areas where sludges and solids accumulate, mainly separators and tank bottoms. This equipment is surveyed for the presence of radioactivity and are disposed of in accordance with COGCC regulations at commercial disposal facilities. The other area that may contain elevated levels of TENORM is produced water, which is usually disposed in accordance with Colorado’s underground injection regulations.</p> <p>The transport, use, storage, and disposal of all chemicals (including PFAS and TENORM) would be in accordance with applicable local, State, and Federal regulations regarding the use, transport, generation, and disposal of those wastes to reduce the potential for release into the environment. In addition, if a release occurs, it is remediated to the appropriate regulatory level protective of human health and safety.</p> <p>Other opportunities for these chemicals to be released into the environment would be during disposal of drill cuttings and other waste streams. All on-site disposal of drill cuttings must comply with COGCC Rule 905.g. Those materials not meeting the standards of the rule are hauled to appropriate commercial disposal facilities.</p> <p>EPA has delegated to the Colorado Department of Public Health and Environment (CDPHE) the authority to implement the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and RCRA. The BLM requires operators to comply with regulations regarding specific chemical use.</p> <p>Also please refer to water resources.</p>
<p>Water Resources, Surface & Ground</p>	<p>Impacts to water resources could result from the surface disturbance associated with the construction of roads, pipelines, well pads, and power lines. There is also the potential for chemicals, produced water, oil, or other fluids that could be accidentally spilled or leaked during the development, production, storage, disposal, and transportation. None of the proposed parcels are within COGCC’s mapped Rule 317 b. Public Water System.</p> <p>Lease Stipulations KFO-NSO-5, LS-NSO-105, KFO-CSU-4, and LS-CSU-111 are applied to the applicable portions of the proposed sale parcels (see Appendices A and B). In addition, a portion of Parcel 0264 would contain lease stipulation WR-CSU-012. These stipulations would help protect, perennial, intermittent, ephemeral streams, and soils.</p> <p>The BLM requires BMPs and ensures stormwater management to protect surface water quality. Potential impacts to surface water from sediment transport are typically addressed through the Stormwater Management Plan (SWMP), which is required for construction and industrial activities per EPA’s National Pollutant Discharge Elimination System (NPDES). The SWMP identifies BMPs that would be implemented to control/slow down runoff and capture sediment.</p> <p>Onshore Oil and Gas Order No.1 requires that an APD package include a Surface Use Plan that contains a reclamation plan that addresses both interim and final reclamation. COGCC rule 1002.f. Stormwater management requires oil and gas operators to implement Best Management Practices (BMPs) at all oil and gas locations to control stormwater runoff in a manner that minimizes erosion, transport of sediment offsite, and site degradation. Rule 1002.f also requires a Spill Prevention, Control, and Countermeasure plan that addresses the transport of chemicals and materials,</p>

Table 3. Issues Considered but Not Analyzed in Detail

Program Area	Rationale
	<p>including loading and unloading operations; vehicle/equipment fueling; outdoor storage activities, including those for chemicals and additives; produced water and drilling fluids storage; erosion and vehicle tracking from well pads, road surfaces, and pipelines; waste disposal practices; leaks and spills. COGCC requires spill response procedures for responding to and cleaning up spills along with having the necessary equipment for spill cleanup readily available to personnel.</p> <p>The BLM's NTL-3A requires the reporting of spills of oil, saltwater, and toxic liquids, or any combination thereof, that result in the discharge 10 or more barrels of liquid. The COGCC Rule 906 require operators to immediately upon discovery control and contain all spills/releases of exploration and production waste or produced fluids. Any spill greater than one barrel outside secondary containment and spills greater than five barrels regardless of being completely contained in secondary containment are required to be reported through COGCC's electronic spill reporting system. Every spill is tracked from the first report of the incident until the final cleanup is to applicable, published standards and approved by COGCC. All reports related to the spill are publicly available through the COGCC website and operators are subject to an enforcement action if a spill results from a violation or a Commission rule, permit, or order, or if they fail to report or remediate a spill. COGCC requires operators to fully investigate and clean up all environmental impacts resulting from a spill, regardless of the size, as soon as practicable.</p> <p>Site-specific review would occur during the APD approval process that includes a review of the drilling and surface use plan of operations. The drilling plan would be verified by the BLM petroleum engineer to ensure the well bore design meets the casing and cementing requirements of Onshore Orders No.1 and No.2 for the protection and/or isolation of all usable water zones, lost circulation zones (including faults), abnormally pressured zones. Wells would be cased with multiple layers of steel and cement to isolate freshwater aquifers from the hydrocarbon zone. The steel casing and surrounding layers of cement protect the drinking water aquifers that the wellbore penetrates. Surface casing is required to extend below the base of the deepest freshwater aquifer to seal it off from possible migration of fluids associated with oil and gas development. A production casing is set to provide an added layer of separation between the oil or natural gas stream and freshwater aquifer. BLM technicians are onsite during the setting of surface casing to verify cementing operations on wells in a well field that have potential for loss circulation or in areas of exploratory drilling. A well survey called a cement bond log is performed to ensure the cement is properly sealed around the casing. Prior to hydraulic fracturing, the casing would be pressure tested with fluid to the maximum pressure that would be applied to the casing.</p> <p>The operator must also submit a drilling permit to the COGCC for review by its professional engineering staff. BLM requires operators to comply with the following COGCC Rules that would protect groundwater resources.</p> <p>COGCC Rules require oil and gas operators to sample water sources within ½ mile of a proposed well within 12 months prior to setting conductor pipe and subsequent samplings between 6 and 12 months and between 60 and 72 months following the completion of the well. The operator is required to immediately notify the COGCC if:</p>

Table 3. Issues Considered but Not Analyzed in Detail

Program Area	Rationale
	<ul style="list-style-type: none"> • The test results indicated thermogenic or a mixture of thermogenic and biogenic gas; • The methane concentration increases by more than 5.0 mg/l between sampling periods; • The methane concentration is detected at or above 10 mg/l BTEX compounds or TPH are detected. <p>The following COGCC flowline regulations would reduce the potential of impacts from oil and gas flow lines to water resources:</p> <ul style="list-style-type: none"> • New crude transfer lines built must be inspected by a third-party inspector before being placed into service. • Operators must maintain flow lines; fix them when leaks are discovered, and all that are not actively in use must have isolation valves locked and tagged out. • All lines must undergo integrity testing before being placed into service; new lines must adhere to steel weld industry standards. Perform annual maintenance of isolation valves. • Isolation valves must be installed on all new flowlines or crude transfer lines, at each point of transfer along the line: the suction end of a pump station, where they meet a breakout tank; at each point where such a line crosses a public water supply or reservoir storing water for human consumption. • All existing flowlines and crude oil transfer lines must be retrofitted with isolation valves at various locations along the line, identified above • Annual pressure testing of lines, or smart pigging every three years. <p>In addition, COGCC requires operators to monitor the well’s bradenhead pressure during hydraulic fracturing and to report promptly to the COGCC any significant pressure increase. Monitoring these pressures helps to indicate if hydraulic fracturing fluids have escaped the target formation. These measures would minimize potential impacts to groundwater resources.</p> <p>COGCC requires the operator to perform an anti-collision scan of existing offset wells that have the potential of being within proximity of the proposed wells prior to drilling operations. The well would only be drilled if the anti-collision scan results indicate that there is not a risk for collision, or harm to people or the environment. The rules also include a fracture stimulation setback for treated intervals of the wellbore.</p> <p>Water used for oil and gas operations would come from existing water rights or an unappropriated source; water use is administered by the State of Colorado. Water depletions attributable to oil and gas development can contribute to the deterioration of critical habitat for the endangered Colorado River fishes and animals, but these effects have been evaluated by the BLM and FWS and continue to be appropriately mitigated through programmatic consultation and ongoing oversight by both agencies. At the development stage, the BLM analyzes detailed project and resource information to ensure that appropriate protections related to water usage are implemented.</p> <p>The Onshore Orders require the operator to submit a Surface Use Plan of Operations, which includes the source type and estimated volume of water used. Produced water can be recycled and used in well completion operations.</p>

Table 3. Issues Considered but Not Analyzed in Detail

Program Area	Rationale
Wilderness Characteristics	<p>Scoping comments referred to the following areas as being potentially impacted by oil and gas development. BLM reanalyzed these areas: Beaver Slide Draw, Blair Mountain/Greasewood. Coffeepot Spring, Dougout Draw, Eagle Rock Draw, North Fork Sand Wash, Racetrack Flat, Shepherders Draw, Vermillion Bluffs, Yellow Cat Wash.</p> <p>Parcel ID LWC Inventory Unit</p> <p>6175 CON-010-005 Racetrack Flat 167 CON-010-005 Racetrack Flat 167 CON-010-016 Vermillion Bluffs 165 CON-010-006 Eagle Rock Draw 165 CON-010-017 Beaver Slide Draw 6167 CON-010-017 Beaver Slide Draw 172 CON-010-019 Coffeepot Spring 171 CON-010-019 Coffeepot Spring</p> <p>153 CON-010-019 Coffeepot Spring 153 CON-010-024 Yellow Cat Wash 152 CON-010-019 Coffeepot Spring 152 CON-010-020 Dougout Draw 154 CON-010-019 Coffeepot Spring 154 CON-010-020 Dougout Draw 154 CON-010-024 Yellow Cat Wash 161 CON-010-024 Yellow Cat Wash 184 CON-010-024 Yellow Cat Wash 186 CON-010-024 Yellow Cat Wash 186 CON-010-025 Shepherder Springs Draw 185 CON-010-024 Yellow Cat Wash 185 CON-010-025 Shepherder Springs Draw 187 CON-010-018 North Fork Sand Wash 187 CON-010-025 Shepherder Springs Draw</p> <p>The lands described in the comment were part of a 1979 initial wilderness inventory of the LSFO. Inventoried Lands with Wilderness Characteristics were considered in the LSFO land use planning process (per Manual 6320, Considering Lands with Wilderness Characteristics in the BLM Land Use Planning Process) and, under the 2011 LSFO RMP/EIS, three areas (Cold Springs, Dino North, and Vermillion) are being managed to protect wilderness characteristics. Vermillion Bluffs, listed in the scoping comments, was inventoried, and found not to contain wilderness characteristics. Since the management of the inventoried lands and their wilderness characteristics was considered in the 2011 LSFO RMP/EIS, no further analysis is needed for those lands that the RMP ROD designated as open to leasing.</p> <p>Oil and gas development adjacent to LWCs can create roads, structures, traffic, increased noise, and lighting which can decrease wilderness characteristics such as naturalness, solitude, and unconfined recreation. For all areas, stipulations for protection of other resources, as well as COAs for development activities, can mitigate specific impacts. Site-specific mitigation measures, including the requirement to use BLM approved BMPs to protect wilderness characteristics, would be analyzed and added at the APD stage, as appropriate. Examples of mitigations on BLM parcels are</p>

Table 3. Issues Considered but Not Analyzed in Detail

Program Area	Rationale
	<p>clustering development, directional drilling, siting roads and facilities in less sensitive areas, screening them with vegetation, installation of directional lighting, shrouds, and/ or lights with wavelengths in the blue, red, or yellow spectrums rather than white, and modifying facility shape and color.</p> <p>Generally foreseeable effects of development were sufficiently considered in the RMP EISs. Portions of Parcels 264 and 6210 and all of Parcel 129 are within areas identified in the 2015 WRFO RMPA as having wilderness character. The 2015 WRFO RMPA determined that the Hammond Draw, Boise Creek, and Blair Mountain/ Greasewood units are not to be managed to protect their wilderness character. None of the parcels located within the LSFO, RGFO, or WRFO are within areas that RMPs have determined should be managed to protect wilderness character. The BLM will complete more detailed analysis if it receives a site-specific development proposal, and COAs may be attached, as appropriate.</p>
<p>Wilderness Study Areas (WSAs), Areas of Critical Environmental Concern (ACECs), Wild & Scenic Rivers</p>	<p>None of the proposed parcels are located in areas designated as WSAs, ACECs, or Wild & Scenic Rivers. In the RGFO, WSAs, ACECs, and Wild & Scenic Rivers resources are not present in the proposed lease area due to the absence of Federal surface lands.</p> <p>Generally foreseeable effects of development were sufficiently considered in the RMP EISs. The BLM will complete more detailed analysis if it receives a site-specific development proposal, and COAs may be attached, as appropriate.</p>
<p>Wild Horses and Burros</p>	<p>The Wild Free-Roaming Horses and Burros Act of 1971 requires BLM to manage wild horses according to multiple use management principles so as to achieve and maintain a thriving, natural ecological balance on public lands. No drilling or development operations will be permitted within a 1-mile radius from wild horse water sources from March 1 to December 1. Exceptions may be granted according to established criteria in the 2011 LSFO RMP. No oil- and gas related helicopter or motor vehicle use will be allowed in the wild horse herd management area (HMA) during foaling season, which runs from March 1 to June 30. Exceptions may be granted according to established criteria and wild horse outcomes as described in the RMP and the Wild Free-Roaming Horses and Burros Act.</p>
<p>Wildlife – Big Game</p>	<p>The RMPs in the NWD (KFO, LSFO, and WRFO) analyze big game habitats in each of the resource areas and the application of TLs to minimize or eliminate impacts to big game habitats. For the protection of big game habitats, TLs apply to parcels within big game winter range and concentration areas, severe winter habitat, and production areas, and CSUs and LNs apply to high value wildlife habitats and priority sagebrush habitats.</p> <p>LN CO-57 alerts potential lessees or their designated operators of requisite work with the BLM and coordination with CPW to take reasonable measures (see 43 CFR 3101.1-2) to avoid and minimize impacts to big game migration corridors and big game winter range.</p> <p>The BLM coordinates with CPW to create master development plans and wildlife mitigation plans as operators propose development of oil and gas fields. When APDs are submitted, the BLM cooperates with CPW to determine the need to modify design features, add COAs, or develop mitigation.</p>

Table 3. Issues Considered but Not Analyzed in Detail

Program Area	Rationale
Wildlife – Federally Listed, Proposed, or Candidate Animal Species	<p>All Federal leases in Colorado have CO-34 BLM stipulation attached to alert lessees of potential habitat for a threatened, endangered, candidate, or other special status plant or animal species.</p> <p>The BLM consulted with FWS regarding listed species during preparation of the RMPs. The stipulations attached to the proposed leases are consistent with management described in the respective RMPs and amendments. The BLM also would apply conservation measures developed through the RMP Section 7 consultation process to any future development of the leases.</p> <p>At this time, the BLM has no further information about potential effects of future development on listed species. The BLM will complete more detailed analysis if it receives a site-specific development proposal, and at that time, the BLM would determine whether further Section 7 consultation is necessary.</p> <p>The BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that may 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.</p> <p>The USFS also consulted with FWS during preparation of the PNG Oil and Gas Leasing Analysis FEIS and ROD.</p>
Wildlife-Raptors	<p>In conformance with the NWD (KFO, LSFO, and WRFO) RMPs, BLM stipulations LS-NSO-106, LS-TL-103, and WR-TL-16 apply to parcels for the protection of raptor nest sites and nesting activities. Due to the historic documentation of nest locations by BLM and CPW and a lack of information of private surface, raptor surveys of potential habitat would be required as part of BLM’s review of any APD it receives.</p>

1.7.4 PUBLIC COMMENT PERIOD

The Preliminary Draft EA and the unsigned draft FONSI are available for a 30-day public review and comment period from November 2, 2021, through December 2, 2021. The document is available on ePlanning (<https://eplanning.blm.gov/eplanning-ui/project/2015560/510>).

Comments should be submitted via ePlanning at the web address above by close of business on December 2, 2021. BLM will review all comments, and may modify the EA and FONSI, if appropriate.

Since parcels previously considered for the March 2021 and June 2021 lease sales are included in the 2022 Lease Sale, previous public comments from the planned 2021 lease sales will be evaluated in addition to the public comments for the 2022 Lease Sale. The EAs and the unsigned FONSI for the March 2021 Competitive Oil and Gas Lease Sale were available for the following 30-day public review and comment periods:

- NWD: November 13, 2020, to December 14, 2020
- PNG of National Forest System lands: October 27, 2020, to November 25, 2020
- RGFO: November 13, 2020, to December 14, 2020

The June 2021 lease sale was deferred prior to the occurrence of the public comment period.

Comments received from the public will be reviewed and incorporated into the EA as appropriate.

1.7.5 PAWNEE NATIONAL GRASSLAND

In addition to the opportunities for public participation noted above, the USFS provided opportunities for public participation during the development of the relevant planning-scale PNG FEIS (USFS 2014).

2. ALTERNATIVES

2.1 ALTERNATIVES ANALYZED IN DETAIL

2.1.1 PROPOSED ACTION ALTERNATIVE

Under this alternative, BLM Colorado would offer all proposed parcels for leasing and potential future development of Federal mineral estate subject to standard terms and conditions and the stipulations and lease notices specified in the corresponding BLM RMP or USFS LRMP. The proposed parcels for this lease sale include parcels in Jackson, Las Animas, Moffat, Rio Blanco, Routt, and Weld counties, totaling 141,675.22 acres of Federal mineral estate with a combination of Federal and private surface (see **Appendix A**). The lands have been grouped into appropriate lease parcels for competitive sale as oil and gas leases in accordance with the 43 CFR 3100 regulations. The leases would include the standard lease terms and conditions for development of the surface of oil and gas leases provided in 43 CFR 3100. Stipulations to protect other surface and subsurface resources would apply, as prescribed by each L/RMP. These stipulations are identified in **Appendix A** and described in detail in **Appendix B**.

2.1.2 PARTIAL LEASING ALTERNATIVE

Under this alternative, BLM Colorado would offer a portion of the proposed parcels for leasing and potential future development of Federal mineral estate, including Parcels 5, 34, 129, 130, 264, 5985, 5994, 6196, and 6210 (**Table 4**). Those lands proposed for lease under this alternative total 5,275.82 acres of Federal mineral estate. The leases would include the standard lease terms and conditions for development of the surface of oil and gas leases provided in 43 CFR 3100. Stipulations to protect other surface and subsurface resources would apply, as prescribed by each RMP.

Field Office	County	Parcel	Acreage
KFO	Jackson	5985	80.00
LSFO	Moffat	5	343.39
LSFO	Moffat	34	1,245.47
LSFO	Moffat	5994	564.62
RGFO	Weld	130	120.00
WRFO	Rio Blanco	129	80.15
WRFO	Rio Blanco	264	1,471.54
WRFO	Rio Blanco	6196	90.65
WRFO	Rio Blanco	6210	1,280.00
TOTAL			5,275.82

2.1.3 NO ACTION ALTERNATIVE

The No Action Alternative is used as the baseline for comparison of the alternatives. Under the No Action Alternative, BLM Colorado would not offer the proposed lease parcels in the 2022 Lease Sale. EOI's

would be processed, and the final status recorded in the public National Fluid Lease Sale System (NFLSS) to reflect that the parcels are not available for leasing. Consistent with land use planning decisions and subject to appropriate stipulations, selection of the No Action Alternative would not prevent future leasing in these areas. The No Action Alternative would result in the continuation of the current land and resource uses in the proposed lease area, and conditions would remain the same as the affected environment described in **Section 3**. Surface management would remain the same and ongoing oil and gas development would continue on surrounding private, State, and Federal leases. The deferred parcels could be considered for inclusion in future lease sales.

2.2 ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL

2.2.1 OFFERING ALL PARCELS SUBJECT TO STANDARD LEASE TERMS AND CONDITIONS

Offering all proposed parcels with only the standard lease terms and conditions on the BLM's lease form was considered as a means to reduce constraints to oil and gas development on public lands. Such an alternative would not conform with the approved L/RMPs, which prescribe stipulations in accordance with FLMPA's Section 102(a)(8) directive to manage the public lands to protect resource values. Therefore, this alternative was not analyzed in detail.

2.2.2 OFFERING ALL PARCELS SUBJECT TO NO SURFACE OCCUPANCY STIPULATIONS

An alternative was considered that would offer all parcels located in areas open to leasing with a NSO stipulation. This alternative was not analyzed in detail because it would not conform with the approved L/RMPs and would only prohibit surface occupancy for oil and gas development; other non-oil and gas occupancy may not be similarly constrained. This alternative would unnecessarily limit oil and gas occupancy in areas where the approved L/RMPs have determined that less restrictive stipulations would adequately mitigate the anticipated impacts to resources under FLPMA's directive to manage the public lands for multiple-use and sustained yield.

3. AFFECTED ENVIRONMENT AND EFFECTS

The EISs for the applicable RMPs contain analyses of the affected environment and the reasonably foreseeable effects of oil and gas leasing and development in the planning areas. The following analysis expands upon those analyses by incorporating new information related to air quality related values, big game, climate change, cultural resources, environmental justice, GHG emissions, GRSG, migratory birds, Native American cultural interests, raptors, socioeconomics, special status species, and visual resources. This analysis will allow the BLM to determine whether the No Action or Proposed Action alternatives may have significant impacts on the affected environment, and if so, whether any of those impacts exceed the effects identified and analyzed in the RMP EISs.

The RMP EISs can be found at the following internet addresses:

- EIS for the KFO ROD/RMP: <https://eplanning.blm.gov/eplanning-ui/project/68543/570>
- EIS for the LSFO ROD/RMP: <https://eplanning.blm.gov/eplanning-ui/project/65605/570>
- EIS for the NWD GRSG ARMPA: <https://eplanning.blm.gov/eplanning-ui/project/36511/570>
- EIS for the Northeast ROD/RMP and RGRA ROD/RMP: <https://eplanning.blm.gov/eplanning-ui/project/68393/570>
- EIS for the WRFO RMP as amended by the WRFO RMPA: <https://eplanning.blm.gov/eplanning-ui/project/65266/570>

In addition, the FEIS for the PNG ROD is available at:

https://www.fs.usda.gov/nfs/11558/www/nepa/95573_FSPLT3_2393686.pdf

The Arapaho and Roosevelt National Forests and PNG Oil and Gas Leasing Analysis FEIS (USFS 2014) is incorporated by reference. In the PNG FEIS, the USFS analyzed the reasonably foreseeable impacts of oil and gas leasing and future development on the following resources and uses: cultural, economics, fire and fuels, fisheries, heritage, hydrology, insects and disease, invasive species, minerals, paleontological, range management, rare plants, recreation, roadless areas, scenery, socioeconomics, soils, timber, threatened and endangered wildlife, transportation, water, travel management, and visual. To support informed decision-making, the BLM has identified and analyzed new information related to air resources, cultural resources, Native American cultural interests, socioeconomics, and environmental justice for all of the proposed parcels in the upcoming 2022 lease sale, including the PNG Parcels.

3.1 REASONABLY FORESEEABLE TRENDS IN THE AFFECTED ENVIRONMENT

The RMP EISs provide the BLM's analysis of effects of oil and gas development based on the reasonably foreseeable oil and gas development (RFD) scenario for each planning area. For RGFO, the analysis in this EA is based on an updated RFD scenario. The analyses of RFD scenarios are incorporated by reference in this EA, and are available at the respective field offices:

- KFO: *Reasonably Foreseeable Development, 2008-2027, Oil and Gas Activities in the Kremmling Field Office: Jackson, Larimer, Grand and Summit Counties, Colorado*, October 2009
- LSFO: *Reasonably Foreseeable Development: Oil and Gas in the Little Snake Field Office Administrative Boundary Area*, June 2007
- RGFO: *Reasonably Foreseeable Development Scenario for Oil and Gas, Royal Gorge Field Office, Colorado*, 2012, and *Reasonably Foreseeable Development Scenario: 2018 Addendum to the 2012 Reasonably Foreseeable Development Scenario for Oil and Gas, Royal Gorge Field Office, Colorado*
- WRFO: *Reasonably Foreseeable Development Scenario for Oil and Gas Activities in the BLM White River Field Office: Rio Blanco, Moffat and Garfield Counties, Colorado*, September 2007.

3.1.1 KREMMLING FIELD OFFICE OIL AND GAS DEVELOPMENT TRENDS

The BLM anticipates future oil and gas development to remain within Jackson County Colorado in the North Park MLP area and target areas lands in existing leases. The KFO RFD anticipates about 370 additional wells would be drilled from 2008 to 2027; approximately 190 of those would be Federal wells, with the remaining wells drilled on private lands.

According to COGCC's online database, 46 new wells (6 with Federal production and 40 fee) have been spudded since the signing of the 2015 KFO RMP. Drilling activity of the last three years consisted of 9 wells (2 with Federal production and 7 fee) drilled in 2017; 13 wells (all fee) drilled in 2018; 6 wells (4 fee, 1 with Federal production, and 1 state) drilled in 2019 and no new wells in the first three quarters of 2020. BLM expects the majority of KFO's future oil and gas activity to be horizontally drilled wells with multiple wells per pad, at a similar rate as in previous years.

3.1.2 LITTLE SNAKE FIELD OFFICE OIL AND GAS DEVELOPMENT TRENDS

The BLM anticipates continued leasing interest in the Sandwash Basin in both Moffat and Routt counties. Most leasing activity is expected to be associated with previously leased lands on which leases have expired. As of December 2020, roughly 14 percent of the available Federal oil and gas minerals were leased, which is a decrease from the 60 percent lease rate in the 2007 LSFO RFD. The LSFO RMP analysis is based on the LSFO RFD scenario of up to 3,031 new wells being drilled within the LSFO by 2031.

According to COGCC's online database, 67 new wells (16 Federal and 51 fee) have been spudded since the signing of the October 2011 LSFO RMP. The most recent well drilled in the LSFO was constructed in August 2016. No new wells were drilled in 2018, 2019, and 2020. It is anticipated LSFO's oil and gas activity in the near future would remain at a much lower trend than predicted in the LSFO RFD.

Other likely or planned actions in the lease area include livestock grazing and associated range improvement projects, vegetation treatments, and both wildfires and prescribed burns. Other mineral development within the area includes oil and gas well and unit development and sodium solution mining. The BLM also manages land within and surrounding the project area for recreational use including dispersed camping, off highway vehicle (OHV) use, and hunting.

3.1.3 ROYAL GORGE FIELD OFFICE OIL AND GAS DEVELOPMENT TRENDS

In the RGFO, certain areas are trending toward fewer APDs and therefore fewer new spuds, while other areas have a trend of increased APDs and spuds. In the RFD, the Wattenberg field area in Weld County had the highest projected density of new wells and showed the highest development potential: >150 new wells per township. Some townships in the area to the north of the Wattenberg field toward the Wyoming State line were projected to have an additional 50 to 150 wells per township. The RFD predicted that most of the new wells in these areas would be directional or horizontal. Aligned with actual development to date, these areas are predicted to have the most drilling activity over the life of the RMP; however, in contrast to the RFD, virtually all of the new wells are horizontal, so the number of new wells per township may be underestimated.

Although much of the Wattenberg field has already been developed with vertical and directional wells, horizontal wells are currently being drilled at a high rate and density, successfully reaching vast amounts of hydrocarbon liquids and gas that were inaccessible by means of those existing, older wells. The area to the north of the Wattenberg field has some historic conventional development and less recent oil and gas activity. Much of this area has recently proven to be very productive through horizontal well technology. Full development is beginning to occur, resulting in a very high density of wells per township. The BLM projects that over 200 wells per township (350 wells on average) could be drilled in these areas over the life of the Eastern Colorado RMP. This projection is based on drilling activity that took place from 2012 to 2017, what is permitted but not drilled in the area, and the typical well spacing that occurs when portions of these areas undergo full development.

Since the RFD scenario was written (Stilwell et al. 2012), horizontal drilling in the planning area and many other places throughout the country has become very common. This relatively recent development has resulted in much greater production volumes of oil and gas than conventional or coal-bed methane (CBM) wells. This has made it practical to develop mineral resources that just a few years ago were not considered to have a high development potential. The RGFO has continued to lease and permit oil and gas operations in the planning area under the existing RGRA ROD/RMP (BLM 1996) and Northeast ROD/RMP (BLM 1986). There are significant differences between what the RFD projected and what has actually occurred since then and is occurring now. As noted above, the analysis in this EA is based on the updated RFD scenario. Other activities in the project area include grazing, agriculture, and mineral development.

Many of the parcels in the RGFO are split estate and the BLM does not speculate on private surface activities. Current practices on the private surface may continue.

3.1.4 WHITE RIVER FIELD OFFICE OIL AND GAS DEVELOPMENT TRENDS

Predicting the quantity of drilling activity that could possibly occur in the next 20 years on Federal, State and private lands within WRFO boundaries is largely speculative and is primarily dependent upon

product pricing and demand. The RFD scenario predicts that the Mesaverde Play Area (MPA) will remain the primary focus of future industry interest over the predicted RFD 20-year timeframe. Most of the future wells drilled would likely be development (field extension, infill) wells. Currently, 60 percent of the available Federal oil and gas mineral estate within the MPA is leased compared to 80 percent that was under lease in 2015 when the WRFO RMPA was signed. Most leasing activity is expected to be associated with reacquiring previously leased lands on which the leases have expired. The WRFO RMPA projected more than 15,000 wells could be drilled with an associated 1,100 well pads constructed over 20 years (2015 to 2035).

According to COGCC's online database, 203 new wells (87 Federal and 116 fee) have been spudded since the signing of the August 2015 WRFO RMPA. Drilling activity in the last three years consisted of 55 wells (21 Federal and 34 fee) drilled in 2018; 78 wells (50 Federal and 28 fee) drilled in 2019; and 10 wells in 2020 (all Federal). It is anticipated the majority of WRFO's future oil and gas activity would occur in the MPA and would consist of directionally drilled wells with multiple wells per pad. The BLM expects oil and gas development to remain on the current track or lower for the foreseeable future in WRFO. These drilling rates are substantially lower than the WRFO RMPA projected rates. Changes in market demand and in Federal and State administrations could likely reduce the current low trend in the WRFO.

Other likely or planned actions in the lease area include livestock grazing and associated range improvement projects, vegetation treatments, and both wildfires and prescribed burns. Other mineral development within the area includes oil and gas well and unit development and sodium solution mining. The BLM also manages land within and surrounding the project area for recreational use, including dispersed camping, OHV use, and hunting.

3.2 ENVIRONMENTAL CONSEQUENCES OF THE NO ACTION ALTERNATIVE

Under the No Action Alternative, 119 parcels totaling 141,675.22 acres would not be leased. There would be no subsequent impacts from oil and/or gas construction, drilling, and production activities, or downstream use of any oil and gas produced. The No Action Alternative would not affect the continuation of the current land and resource uses in the proposed lease area. Oil and gas exploration and development activities may continue in surrounding areas that are currently leased.

The BLM assumes that the No Action Alternative (no lease option) may result in less oil and gas production than under the Proposed Action Alternative. This reduction would diminish Federal and State royalty income, and increase the potential for Federal lands to be drained by wells on adjacent private or State lands. However, oil and gas production and consumption are driven by a variety of complex interacting factors including energy costs, energy efficiency, availability of other energy sources, economics, demographics, geopolitical circumstances, and weather; therefore, it is uncertain whether and to what extent the No Action Alternative may affect overall domestic oil and gas production.

3.3 ENVIRONMENTAL CONSEQUENCES OF LEASING AND POTENTIAL DEVELOPMENT

The sale of parcels and issuance of oil and gas leases are administrative actions. Under the approved RMPs, stipulations are attached to mitigate any known environmental or resource conflicts that may occur on a proposed lease parcel. On-the-ground impacts would not occur until a lessee or its designated operator applies for and receives approval to undertake surface-disturbing lease actions. If the BLM receives an application for an exploration or development action, it will prepare additional NEPA analysis. At that time, the BLM may apply additional impact minimization measures as COAs to moderate identified adverse effects beyond the protections provided by the lease stipulations (see **Attachment D**).

The BLM's analysis at the leasing stage is limited to those effects that are reasonably foreseeable at this time. The BLM cannot meaningfully determine at the leasing stage whether, when, and in what manner and intensity a lease would be explored or developed. The uncertainty at the lease sale stage includes crucial factors that will affect potential impacts, such as well density, geological conditions, development type (vertical, directional, horizontal), hydrocarbon characteristics, equipment to be used during construction, drilling, production, and abandonment operations, and potential regulatory changes over the life of the lease. Therefore, much of the discussion of potential environmental effects presented in the following resource or use-specific subsections is necessarily confined to qualitative rather than quantitative characterization.

3.3.1 ISSUE 1: HOW WOULD LEASING POTENTIALLY AFFECT AIR QUALITY RELATED VALUES?

This section describes the present baseline and reasonably foreseeable trends in air quality that could be impacted by the Proposed Action and provides further discussion of the causal relationship between the Proposed Action and impacts on the affected environment if the BLM were to authorize oil and gas exploration and development operations on the subject lease parcels in the future.

Affected Environment

In accordance with Section V of BLM Colorado's Comprehensive Air Resource Protection Protocol (CARPP), the BLM Colorado State Office air resource specialists prepared the Annual Report (2.0) as a comprehensive assessment tool to assist in the preparation of NEPA for oil and gas projects. The BLM Colorado Annual Report (AR) provides up-to-date information on the state of the atmosphere (air pollutant concentration trends, air quality related values [AQRVs], etc.) and oil and gas development (current regulations, rates for drilling and production, emission inventories, etc.) for each applicable Colorado field office or planning area. The report also places this information in the context of the Colorado Air Resource Management Modeling Study (CARMMS 2.0), which provides cumulative analyses of U.S. National Ambient Air Quality Standards (NAAQS) and AQRV impacts for multiple projected oil and gas development scenarios with varying emissions levels in Colorado out through year 2025.

The AR is a web-based, dynamic, data-driven document. This EA incorporates by reference the data from the AR to aid in describing the affected environment, and the effects of leasing. The above referenced documents are available on BLM Colorado's website at:

<https://www.blm.gov/programs/natural-resources/soil-air-water/air/colorado>

The section of the AR that provides an overview of the affected environment parameters and baseline conditions is Section 2.0, Affected Environment. This section of the report describes and defines the applicable general and oil- and gas-specific air quality regulations as well as the authority for such laws; provides a basic overview of the science and issues associated with the various types of air pollutants (criteria, hazardous, and GHGs), AQRVs (visibility, deposition, and ozone), any applicable metrics for analysis, and the contexts for analysis relative to various air-related geographic designations (attainment, non-attainment, Class I airsheds, etc.), and provides for all available pollutant monitoring data and location-based national emission inventory data. This section is referenced to introduce air resource concepts and acronyms, and to provide background for the analysis in this EA.

Oil and Gas Production Data, Ozone, and Air Quality Related Values – Reasonably Foreseeable Future Trends

Federal oil and gas development in Colorado is expected to continue at its current pace (i.e., below the rate of full RFD development) for the foreseeable future. The BLM does not anticipate significant shifts

in petroleum market dynamics (e.g., supply and demand), or changes in development/recovery technologies, newly discovered resources/plays, or political influences (tax or regulatory incentives), that would significantly affect development rates in Colorado. Continued field development, operation of well site equipment, and associated vehicle traffic would result in minor cumulative contributions to atmospheric GHGs. Natural gas and condensate produced from oil and gas development would be refined to produce a wide range of fuel products for consumer or commercial use. The combustion of these fuels would generate GHGs, which may be controlled through regulations such as emission standards or applicable air permit requirements.

The sections of the AR that describe the affected environment in Colorado with respect to recent oil and gas development and production data, and air quality and related value trends are: Section 4.3 for KFO, Section 4.4 for LSFO, Section 4.5 for RGFO (including PNG), and Section 4.8 for WRFO. These sections of the report provide an overview of the air and atmospheric conditions and current air quality trends; summarize the CARMMS 2.0 source apportionment modeling future year results; show the estimated historical oil and gas emissions by year and the scaled impacts relative to the CARMMS modeled scenarios, and present findings for all of these data. These sections are referenced to describe the current and future affected environment for all of Colorado. As described in the AR, new Federal oil and gas development for most parts of Colorado including the subject field offices (including the PNG) has been occurring in-line with the CARMMS 2.0 “low” oil and gas development rates. CARMMS 2.0 baseline design values (DVBs) for monitors near some of the subject parcels in Rio Blanco (WRFO) and Weld (RGFO) counties are above the ozone NAAQS of 70 parts per billion (ppb). CARMMS 2.0 future trends modeling predicts that overall air quality and related values will improve in the future around the region, including at these monitors with baseline exceedances. These projections account for new Federal oil and gas development and operations.

Environmental Consequences

Proposed Action Alternative

As described in the Affected Environment, CARMMS 2.0 provides source apportionment (groups of oil and gas sources) and cumulative analyses of NAAQS and AQRV impacts for multiple projected oil and gas development scenarios with varying emissions levels in Colorado out through year 2025. An overview and details of the CARMMS can be found on the BLM’s website: <https://www.blm.gov/programs/natural-resources/soil-air-water/air/colorado>.

As described in CARMMS 2.0, the “low” future oil and gas development scenario is based on historical average annual development continuing for future years and the “high” future oil and gas development scenario is based on the RFD for each planning area. For this lease sale assessment, the BLM is using the CARMMS low scenario modeled impacts to describe potential field office quasi-cumulative (foreseeable oil and gas development in each field office) impacts for the No Action Alternative, and the CARMMS high scenario modeled impacts to describe potential field office quasi-cumulative (new oil and gas development that could occur on subject lease parcels and other foreseeable oil and gas development in each field office) impacts for the Proposed Action Alternative on most of the lease parcels that are located in low development potential areas. **Tables 5, 6, and 7** present the CARMMS 2.0 predicted potential air quality related impacts for visibility, nitrogen deposition, and ozone for each subject field office.

Table 5. Visibility, Maximum Number of Reported Days of Exceedance for Haze Index Thresholds of Concern at Any Class I Area, High Oil and Gas Development Scenario		
Source Group	Number of Days in Exceedance of 0.5 Deciview Change (Δdv)	Number of Days in Exceedance of 1.0 Δdv
KFO	0	0
LSFO	0	0
RGFO	0	0
WRFO	41 (Dinosaur National Monument)	4 (Dinosaur National Monument)

Table 6. Nitrogen Deposition, Maximum Annual Deposition at Any Receptor in Class I Area, Low and High Oil and Gas Development Scenarios		
Source Group	Maximum Deposition, Low Scenario (kilograms per hectare per year [kg/ha/yr])	Maximum Deposition, High Scenario (kg/ha/yr)
KFO	0.001 (Rawah Wilderness)	0.007 (Rawah Wilderness)
LSFO	0.002 (Mount Zirkel)	0.019 (Mount Zirkel)
RGFO	0.001 (Rocky Mountain National Park)	0.003 (Rocky Mountain National Park)
WRFO	0.017 (Dinosaur National Monument)	0.135 (Dinosaur National Monument)

Table 7. Ozone: Maximum Contribution to the 4th Highest Daily Maximum 8-hour (DMAX8) Ozone Concentration, Low and High Oil and Gas Development Scenarios		
Source Group	DMAX8, Low Scenario (ppb)	DMAX8, High Scenario (ppb)
KFO	< 0.1	0.1
LSFO	0.1	1.0
RGFO	0.1	0.8
WRFO	1.0	7.1

As shown in **Table 5**, there are no days of predicted significant visibility impact contributions for new oil and gas development that could occur within the LSFO, KFO, and RGFO source apportionment areas, and several days of potential visibility impacts due to new Federal oil and gas development and production that could occur within the WRFO. In **Table 6**, predicted potential annual nitrogen deposition and loading for the CARMMS source groups (new Federal oil and gas within each field office) is minimal with respect to cumulative critical loads (~ 2.2 kg/ha/yr) even though the CARMMS 2.0 predicts cumulative exceedances (above 2.2 kg/ha/yr) at several Class I areas around the region in the future. Overall, cumulative nitrogen deposition is expected to improve at all Class I areas around the region relative to baseline conditions for the CARMMS 2.0 low scenario. In **Table 7**, the maximum ozone contributions to cumulative concentrations are at or below the EPA project-level significant impact threshold (1.0 ppb) for the CARMMS 2.0 low scenario; low scenario results are more appropriate for assessing potential future project-level impacts associated with new oil and gas development that could occur on subject lease parcels since the high scenario would represent multiple future projects, including those that may occur on and off the lease parcels.

The 0.5 and 1.0 dv visibility change and 1.0 ppb ozone contribution thresholds used for this analysis are project-level thresholds, thresholds that Federal land managers and the EPA use to evaluate the relative impacts of emissions from single stationary sources (e.g., power plants, oil and gas processing facilities) undergoing new permit review or modification. Federal oil and gas projects for these field offices usually

consist of constructing one to two new pads and developing 10 to 40 new wells, meaning that each field office would likely have one to two average-sized project(s) as a result of issuing the subject leases. The CARMMS 2.0 low oil and gas scenario represents about one to two new oil and gas projects, whereas the high oil and gas development scenario represents several new oil and gas projects for each field office. Therefore, it is more appropriate to describe only those potential impacts associated with new wells that could be developed on the subject lease parcels for each field office using the CARMMS 2.0 low scenario results, whereas the CARMMS 2.0 high scenario results better represent quasi-cumulative field office total contributions accounting for new oil and gas on the subject lease parcels and other foreseeable oil and gas development in the field office. Based on these modeling results, the BLM concludes that the degree of effects on air quality and related values in the affected area resulting from new oil and gas development and production that could occur on the proposed lease parcels would be minimal.

Further supporting this conclusion, CARMMS 2.0 predicted that contributions to ozone NAAQS exceedances (instances when the model predicted concentrations above 70 ppb) for new KFO, LSFO, RGFO, and WRFO Federal oil-and-gas-related emissions would be minimal, even though future design values (DVs) around the region, including at monitors located in the RGFO and WRFO, were predicted to record concentrations above the ozone NAAQS (but less than the baseline values at these locations). New 2016 to 2025 Federal oil-and-gas-related emissions in the field offices were predicted to have the following effects on future ozone NAAQS exceedances:

- For KFO, could contribute < 0.01 ppb (max) to future ozone NAAQS exceedances.
- For LSFO, could contribute 0.02 ppb (max) to future ozone NAAQS exceedances.
- For RGFO, could contribute 0.10 ppb (max) to future ozone NAAQS exceedances (within the Denver / Front Range ozone Non-attainment Area [NAA]).
- For WRFO, could contribute 0.12 ppb (max) to future ozone NAAQS exceedances (within the WRFO).

General Conformity

As described in Section 2.0 of the BLM Colorado Annual Report, Federal actions taking place in an air quality region designated as either Maintenance or Non-attainment may be subject to EPA's general conformity rule, as directed in the Clean Air Act, 42 U.S.C. § 7506. For this sale, four proposed lease parcels are within the Denver / Northern Front Range Ozone NAA. BLM has evaluated the proposed lease sale in accordance with the provisions of 40 CFR Part 93, Subpart B. Based on 40 CFR § 93.153(c), the BLM has determined that the requirement to perform a full conformity determination does not apply to the Proposed Action for the following reasons:

- Under 40 CFR 93.153(c)(2), a conformity determination is not required for actions "which would result in no emissions increase or an increase in emissions that is clearly de minimis." Leasing does not authorize emission-generating activities, and therefore does not directly result in any net emissions increases.
- A conformity determination is not required "where the emissions (direct or indirect) are not reasonably foreseeable" (40 CFR § 93.153(c)(3)). While this EA provides information for the factors that should be considered to determine a reasonable estimate of foreseeable emissions for the purposes of a NEPA analysis (estimates made for potential air quality impacts and GHG and Climate Change assessment), the BLM does not have specific information about how or if any specific parcel under consideration will be developed during the initial 10-year lease period, such that a more precise emissions inventory could be reasonably estimated and compared to the thresholds provided in 40 CFR § 93.153(b). As noted earlier in this document, several factors influence potential emissions estimates and can be highly variable depending on the project. Although the general ranges of potential emissions used for analysis and discussion in this EA are

adequate for NEPA analysis, the estimates are not “reasonably foreseeable” under the definition in the general conformity rule and are not sufficiently specific to support conformity analysis. The emissions will not be reasonably foreseeable with that degree of specificity until the BLM receives a specific development proposal.

- 40 CFR § 93.153(d)(1) provides that a conformity determination is not required for Federal actions or portions thereof that include major or minor new or modified stationary sources that require a permit under the New Source Review (NSR) program (Section 110(a)(2)(c) and Section 173 of the Clean Air Act) or the prevention of significant deterioration program (Title I, Part C of the Clean Air Act). It is uncertain at this time, but highly likely that several project design features that may be used in future development, including equipment sets such as tanks, separators, compression engines, pump jacks, and dehydration units, would require at least a minor new source review permit prior to construction. Emissions from such permitted facilities would not be subject to the general conformity analysis provisions. For example, among the recent projects analyzed to produce the emissions estimates disclosed above (some of which were in the ozone NAA), most include permitted storage tanks and stationary engines; several also have permitted heaters and production stream components.
- Finally, an onshore lease sale is analogous to the example provided in 40 CFR § 93.153(c)(3)(i), “Initial Outer Continental Shelf lease sales which are made on a broad scale and are followed by exploration and development plans on a project level.” Similarly, substantial emission-generating activities cannot occur without further BLM analysis and approval of proposals for exploration and development operations. The BLM will assess project-specific impacts on air resources during the parcel development (permitting) stage, including potential impacts to air quality related values at nearby Class I areas. More detailed information in the form of a specific development proposal will be available to the BLM at the development stage, thus enabling a more precise estimate of emissions to analyze potential impacts on air quality at that time.

Partial Leasing Alternative

As described above for the Proposed Action, the degree of effects on air quality and related values in the affected area resulting from new oil and gas development and production that could occur on the proposed lease parcels would be minimal. Therefore, potential air quality and related values impacts for the new oil and gas development and emissions that could occur as a result of the Proposed Action and Partial Leasing alternatives are similar, although this alternative would be expected to result in an even smaller volume of emissions.

No Action Alternative

As described above for the Proposed Action, the degree of effects on air quality and related values in the affected area resulting from new oil and gas development and production that could occur on the proposed lease parcels would be minimal. Therefore, potential air quality and related values impacts for the new oil and gas development and emissions that could occur as a result of the Proposed Action and No Action alternatives are similar.

Mitigation Strategies

Prior to approving development activities on a leased parcel, the BLM conducts a refined project-level analysis that considers the impacts of the operator’s development plans. The BLM typically considers the emissions inventory for the proposal (including GHGs), and its analysis considers conditions in the region and estimated emissions from other development on and outside the lease and other nearby sources that influence the affected environment. Based on that analysis, the BLM may condition its approval on

specific mitigation measures within its authority to address resource impacts, including impacts associated with air pollutant emissions.

3.3.2 ISSUE 2: HOW WOULD FUTURE POTENTIAL DEVELOPMENT OF PROPOSED LEASE PARCELS CONTRIBUTE TO GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE?

The proposed leasing action could lead to emissions of carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O), the three most common greenhouse gases associated with oil and gas development. These GHG emissions would be emitted from leased parcels if developed, and from the consumption of any fluid minerals that may be produced. However, the BLM cannot reasonably determine at the leasing stage whether, when, and in what manner a lease would be explored or developed. The uncertainty that exists at the time the BLM offers a lease for sale includes crucial factors that would affect actual GHG emissions and associated impacts, including but not limited to the future feasibility of developing the lease, well density, geological conditions, development type (vertical, directional, or horizontal), hydrocarbon characteristics, specific equipment used during construction, drilling, production, abandonment operations, production and transportation, and potential regulatory changes over the 10-year primary lease term.

For the purposes of this analysis, the BLM has evaluated the potential effects of the proposed leasing action on climate change by estimating and analyzing potential GHG emissions from projected oil and gas development on the parcels proposed for leasing using estimates based on past oil and gas development and available information from existing development within the State.

Additional discussion of climate change science and predicted impacts as well as the reasonably foreseeable and cumulative GHG emissions associated with BLM's oil and gas leasing actions are included in the *BLM Specialist Report on Annual Greenhouse Gas Emissions and Climate Trends (2020)* (hereinafter referred to as the Annual GHG Report). This report presents the estimated emissions of GHGs attributable to fossil fuels produced on lands and mineral estate managed by the BLM. The Annual GHG Report is incorporated by reference as an integral part of the analysis for this proposed lease sale and is available at <https://www.co.blm.gov/AirResourcesReport/ghg/>.

Affected Environment

Climate change is a global process that is affected by the sum total of GHGs in the Earth's atmosphere. The incremental contribution to global GHGs from a single proposed land management action cannot be accurately translated into its potential effect on global climate change or any localized effects in the area specific to the action. Currently, global climate models are unable to forecast local or regional effects on resources. However, there are general projections regarding potential impacts on natural resources and plant and animal species that may be attributed to climate change from GHG emissions over time. GHGs influence the global climate by increasing the amount of solar energy retained by land, water bodies, and the atmosphere. GHGs can have long atmospheric lifetimes, which allows them to become well mixed and uniformly distributed over the entirety of the Earth's surface no matter their point of origin. Therefore, potential emissions from the Proposed Action can be compared to State, National and global GHG emission totals to provide context of their significance and potential contribution to climate change impacts.

Table 8 shows the total estimated GHG emissions from fossil fuels at the global and national scales over the last 5 years. Emissions are shown in megatonnes (Mt) per year of carbon dioxide equivalent (CO₂e). Chapter 3 of the Annual GHG Report contains additional information on GHGs and an explanation of CO₂e. **Table 9** shows GHG emissions data from the largest GHG emitting facilities as reported to the EPA through its Greenhouse Gas Reporting Program (GHGRP) for those States associated with this potential leasing action. **Table 9** also shows energy-related CO₂ emissions reported by the U.S. Energy

Information Administration (EIA) in its annual State Energy-Related Carbon Dioxide Emissions tables (EIA 2021a). State energy-related CO₂ emissions include emissions from fossil fuel use across all sectors (residential, commercial, industrial, transportation, and electricity generation) and are released at the location where the fossil fuels are consumed.

Scale	2015	2016	2017	2018	2019
Global	52,700	52,800	53,500	55,300	59,100
U.S.	5,249	5,153	5,083	5,244	5,107

Source: Annual GHG Report, Chapter 6, Table 6-1
 Mt (Megatonne) = 1 million metric tons

State	EPA – GHGRP Large Emitters (Mt CO ₂ /yr)			EIA – Energy-related CO ₂ Emissions (Mt/yr)
	Total Reported	Power Plants	Petroleum and Natural Gas Systems	
Colorado	45.3	34.3	4.3	89.3

Sources: Annual GHG Report, Chapter 6, Table 6-3; EIA 2021a

Additional information on current State, National, and global GHG emissions as well as the methodology and parameters for estimating emissions from BLM fossil fuel authorizations and cumulative GHG emissions is included in the Annual GHG Report (see Chapters 4, 5, and 6).

The continued increase of anthropogenic GHG emissions over the past 60 years has contributed to global climate change impacts. A discussion of past, current, and projected future climate change impacts is described in Chapters 8 and 9 of the Annual GHG Report. These chapters describe currently observed climate impacts globally, nationally, and in each State, and present a range of projected impact scenarios, depending on future GHG emission levels. These Chapters are incorporated by reference in this analysis.

Environmental Consequences

Proposed Action Alternative

While the leasing action itself does not directly generate GHG emissions, such emissions are reasonably foreseeable consequences of oil and gas development. There are three general phases of post-lease development that would generate GHG emissions that include 1) well development (well site construction, well drilling, and well completion), 2) production operations (processing, storage, and transport/distribution), and 3) end-use (combustion) of the fuels produced.

The BLM cannot develop a precise emissions inventory at the leasing stage due to uncertainties including the type (oil, gas, or both), scale, and duration of potential development, the types of related equipment (drill rig engine tier rating, horsepower, fuel type), and the mitigation measures that a future lessee may propose in their development plan. In order to estimate reasonably foreseeable on-lease emissions at the leasing stage, the BLM uses estimated well numbers based on State data for past lease development combined with per-well drilling, development, and operating emissions data from representative wells in the area. The amount of oil or gas that may be produced if the offered parcels are developed is unknown. For purposes of estimating production and end-use emissions, reasonably foreseeable wells are assumed to produce oil and gas in similar amounts as existing nearby wells. While the BLM has no authority to

direct or regulate the end-use of the products, for this analysis, the BLM assumes all produced oil or gas will be combusted (such as for domestic heating or energy production). The BLM acknowledges that there may be additional sources of GHG emissions along the distribution, storage, and processing chains (commonly referred to as midstream operations) associated with production from the lease parcels. These sources may include emissions of methane (a more potent GHG than CO₂ in the short term) from pipeline and equipment leaks, storage, and maintenance activities. At the leasing stage, these sources of emissions are highly speculative; and the BLM has therefore chosen to assume, for the purposes of this analysis, that all produced oil or gas will be combusted. We note, however, that the potential emissions from these sources have been estimated and are accounted for in the cumulative assessment of GHGs from BLM’s fossil fuel leasing program.

The emissions used in this analysis are estimated as described above using the BLM Lease Sale Emissions Tool. Emissions are presented for each of the three phases described below.

- Well development emissions occur over a short period and include heavy equipment and vehicle exhaust, drill rig engine emissions, completion equipment, pipe venting, and emissions from any well treatments, such as hydraulic fracturing, that may be used.
- Production operations and end-use emissions occur over the entire production life of a well, which is assumed to be 30 years for this analysis based on the productive life of a typical oil/gas field. Production emissions may result from storage tank breathing and flashing, truck loading, pump engines, heaters and dehydrators, pneumatic instruments or controls, flaring, fugitives, and vehicle exhaust.
- End-use emissions occur from the downstream combustion of produced oil or gas. End-use emissions are estimated by multiplying the estimated ultimate recovery (EUR) of produced oil and gas with emissions factors for combustion established by the EPA (Tables C-1 and C-2 to Subpart C of 40 CFR § 98). Additional information on emission factors and EUR factors can be found in the Annual GHG Report (Chapter 4).

Tables 10 and 11 list the estimated direct and indirect GHG emissions in metric tons (tonnes) for the proposed lease sale over the average 30-year production life of the lease.

Table 10. Estimated Life-of-Lease Emissions (On-site) from Well Development and Production Operations Associated with the Proposed Action Alternative (tonnes)					
Activity	CO₂	CH₄	N₂O	CO₂e (100-year)	CO₂e (20-year)
Well Development	376,606	149.81	2.997	381,889	389,784
Production Operations	2,810,882	48,966.59	6.431	4,271,842	6,852,381

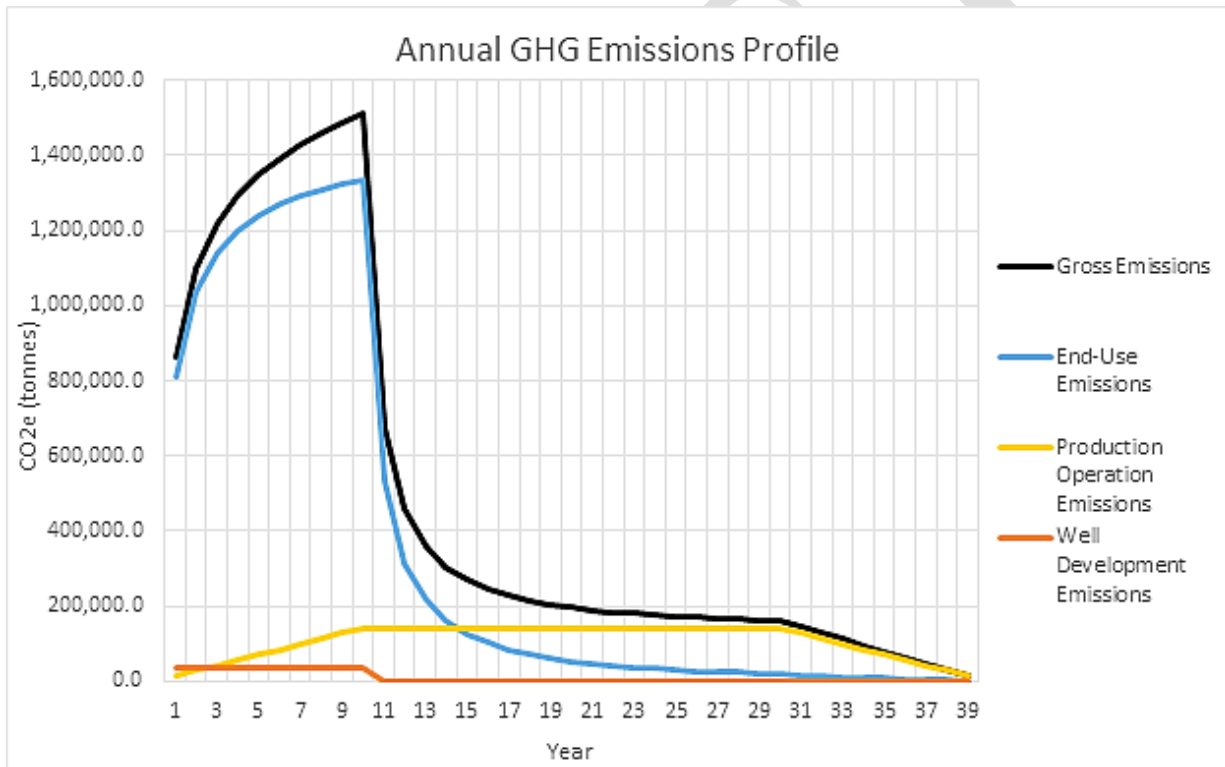
Source: BLM Lease Sale Emissions Tool

Table 11. Estimated Life-of-Lease Indirect Emissions from End-Use Combustion of Produced Oil and Gas Associated with the Proposed Action Alternative (tonnes)						
Fluid Mineral	EUR (barrels [bbl] or thousand cubic feet [mcf])	CO₂	CH₄	N₂O	CO₂e (100-year)	CO₂e (20-year)
Oil	16,175,372 bbl	6,988,308	281.26	56.251	7,012,046	7,026,868
Gas	129,506,953 mcf	7,050,302	132.87	13.287	7,057,889	7,064,891
Total End-Use	--	14,038,610	414.13	69.539	14,069,935	14,091,759

Source: BLM Lease Sale Emissions Tool

GHG emissions vary annually over the production life of a well due to declining production over time. **Table 12** provides maximum-year and average-year emissions over the life of the lease. **Figure 1** shows the estimated annual GHG emissions profile over the production life of a typical lease including well development, well operation, end-use, and gross (total of well development, well production, and end-use) emissions.

Table 12. Estimated Direct and Indirect Emissions from Lease Parcels Associated with the Proposed Action Alternative on an Annual and Life-of-Lease Basis (tonnes)					
Timeframe	CO₂	CH₄	N₂O	CO₂e (100-year)	CO₂e (20-year)
Annual Maximum	1,460,889	1,686.46	7.111	1,513,087	1,601,963
Annual Average	441,695	1,270.01	2.025	480,094	547,024
Life-of-Lease	17,226,098	49,530.53	78.967	18,723,665	21,333,925
Source: BLM Lease Sale Emissions Tool					



Source: BLM Lease Sale Emissions Tool

Figure 1. Estimated Annual GHG Emissions Profile over the Life of a Lease

In order to put the estimated GHG emissions for this lease sale in context, potential emissions that could result from development of the lease parcels for this sale can be put into relatable terms by comparing to other common activities that generate GHG emissions, as well as to emissions at State and National scales. The EPA GHG equivalency calculator can be used (<https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>) to express the potential average-year GHG emissions on a scale relatable to everyday life. For instance, the projected average annual GHG emissions from expected development following the proposed lease sale are equivalent to 104,368 gasoline-fueled passenger vehicles driven for

1 year, or the emissions that could be avoided by operating 100 wind turbines as an alternative energy source or offset by the carbon sequestration of 585,480 acres of forest land.

Table 13 compares estimated maximum and average annual lease-sale emissions to existing State GHG emissions, Federal BLM fossil fuel (oil, gas, and coal) emissions, and U.S. fossil fuel and total GHG emissions reported in the EPA Inventory of U.S. GHG Emissions and Sinks: 1990-2019.

Table 13. Comparison of Lease Sale Annual Emissions to Other Sources			
Reference	CO₂e¹ (Mt per year)	Average Year Percent of Reference	Max Year Percent of Reference
Max Year	1.513	--	--
Average Year	0.480	--	--
CO Federal (Oil & Gas) ²	48.4	0.993%	3.129%
CO Federal (Oil, Gas, and Coal) ²	77.3	0.621%	1.958%
U.S. Federal (Oil & Gas) ²	427.7	0.112%	0.354%
U.S. Federal (Oil, Gas, and Coal) ²	918.6	0.052%	0.165%
U.S. Total (All Sectors) ³	6,558.35	0.007%	0.022%

¹ Estimates are based on 100-year global warming potential (GWP) values provided by AR-5.
² Federal Total values come from the BLM Specialist Report on Annual Greenhouse Gas Emissions Table ES-1.
³ U.S. values come from values come from Annex 6 Table A-244 of the EPA Inventory of U.S. GHG Emissions and Sinks: 1990-2019 (EPA 2021): <https://cfpub.epa.gov/ghgdata/inventoryexplorer/#allsectors/allsectors/allgas/gas/current>.

Table 14 compares emission estimates over the 30-year life of the lease compared to the 30-year projected Federal emissions in the State and Nation from existing wells, the development of approved APDs, and emissions related to reasonably foreseeable lease actions.

Table 14. Comparison of the Life-of-Lease Emissions to Other Federal Oil and Gas Emissions from Existing Wells, Development of Approved APDs, and Other Leasing Actions in the State and Nation		
Reference	Mt CO₂e (100-year)	Life-of-Lease Percent of Reference
Life of Lease	18.72	100.00%
CO Reasonably Foreseeable Short-term Federal (O&G)	296.74	6.31%
CO EIA Projected Long-term Federal (O&G)	1,314.91	1.42%
U.S. Short-term Federal (O&G)	4,307.51	0.44%
U.S. Long-term Federal (O&G)	13,958.91	0.13%

Source: U.S. and Federal emissions from BLM Lease Sale Emissions Tool and Annual GHG Report Tables 5-17 and 5-18.

Compared to emissions from other existing and foreseeable Federal oil and gas development, the life-of-lease emissions for the Proposed Action are between 1.4% to 6.3% of Federal fossil fuel authorization emissions in the State and between 0.2% to 0.4% of Federal fossil fuel authorization emissions in the Nation.

In summary, potential GHG emissions from the Proposed Action could result in GHG emissions of 18.724 Mt CO₂e over the life of the leases.

Monetized Impacts from GHG Emissions

The “social cost of carbon,” “social cost of nitrous oxide,” and “social cost of methane” – together, the “social cost of greenhouse gases” (SC-GHG) are estimates of the monetized damages associated with incremental increases in GHG emissions in a given year.

On January 20, 2021, President Biden issued Executive Order (EO) 13990, Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis (86 FR 7037 [Jan. 25, 2021]). Section 1 of EO 13990 establishes an Administration policy to, among other things, listen to the science; improve public health and protect our environment; ensure access to clean air and water; reduce GHG emissions; and bolster resilience to the impacts of climate change (*Id.*, Sec. 1). Section 2 of the EO calls for Federal agencies to review existing regulations and policies issued between January 20, 2017, and January 20, 2021, for consistency with the policy articulated in the EO and to take appropriate action.

Consistent with EO 13990, the Council on Environmental Quality (CEQ) rescinded its 2019 “Draft National Environmental Policy Act Guidance on Considering Greenhouse Gas Emissions” and has begun to review for update its “Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews” issued on August 5, 2016 (2016 GHG Guidance) (86 FR 10252 [February 19, 2021]). While CEQ works on updated guidance, it has instructed agencies to consider and use all tools and resources available to them in assessing GHG emissions and climate change effects including the 2016 GHG Guidance (*Id.*).

Regarding the use of Social Cost of Carbon or other monetized costs and benefits of GHGs, the 2016 GHG Guidance noted that NEPA does not require monetizing costs and benefits (2016 GHG Guidance, p. 32). It also noted that “the weighing of the merits and drawbacks of the various alternatives need not be displayed using a monetary cost-benefit analysis and should not be when there are important qualitative considerations” (*Id.*).

Section 5 of EO 13990 emphasized how important it is for Federal agencies to “capture the full costs of greenhouse gas emissions as accurately as possible, including by taking global damages into account” and established an Interagency Working Group on the Social Cost of Greenhouse Gases (the “IWG”) (EO 13990, Sec. 5). In February of 2021, the IWG published Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide: Interim Estimates under EO 13990 (IWG 2021). This is an interim report that updated previous guidance from 2016. The final report is expected in January 2022.

In accordance with this direction, this subsection provides estimates of the monetary value of changes in GHG emissions that could result from selecting each alternative. Such analysis should not be construed to mean a cost determination is necessary to address potential impacts of GHGs associated with specific alternatives. These numbers were monetized; however, they do not constitute a complete cost-benefit analysis, nor do the SC-GHG numbers present a direct comparison with other impacts analyzed in this document. For instance, the BLM’s overall economic analysis for this lease sale does not monetize most of the major costs or benefits, and does not include all revenue streams from the Proposed Action. SC-GHG is provided only as a useful measure of the benefits of GHG emissions reductions to inform agency decision-making.

For Federal agencies, the best currently available estimates of the SC-GHG are the interim estimates of the social cost of carbon dioxide (SC-CO₂), methane (SC-CH₄), and nitrous oxide (SC-N₂O) developed by the IWG on the SC-GHG. Select estimates are published in the Technical Support Document (IWG 2021) and the complete set of annual estimates are available on the Office of Management and Budget’s website (<https://www.whitehouse.gov/omb/information-regulatory-affairs/regulatory-matters/#scghgs>).

The IWG’s SC-GHG estimates are based on complex models describing how GHG emissions affect global temperatures, sea level rise, and other biophysical processes; how these changes affect society through, for example, agricultural, health, or other effects; and monetary estimates of the market and nonmarket values of these effects. One key parameter in the models is the discount rate, which is used to estimate the present value of the stream of future damages associated with emissions in a particular year. A higher discount rate assumes that future benefits or costs are more heavily discounted than benefits or costs occurring in the present (i.e., future benefits or costs are a less significant factor in present-day decisions). The current set of interim estimates of SC-GHG have been developed using three different annual discount rates: 2.5%, 3%, and 5% (IWG 2021).

As expected with such a complex model, there are multiple sources of uncertainty inherent in the SC-GHG estimates. Some sources of uncertainty relate to physical effects of GHG emissions, human behavior, future population growth and economic changes, and potential adaptation (IWG 2021). To better understand and communicate the quantifiable uncertainty, the IWG method generates several thousand estimates of the social cost for a specific gas, emitted in a specific year, with a specific discount rate. These estimates create a frequency distribution based on different values for key uncertain climate model parameters. The shape and characteristics of that frequency distribution demonstrate the magnitude of uncertainty relative to the average or expected outcome.

To further address uncertainty, the IWG recommends reporting four SC-GHG estimates in any analysis. Three of the SC-GHG estimates reflect the average damages from the multiple simulations at each of the three discount rates. The fourth value represents higher-than-expected economic impacts from climate change. Specifically, it represents the 95th percentile of damages estimated, applying a 3% annual discount rate for future economic effects. This is a low probability, but high damage scenario, representing an upper bound of damages within the 3% discount rate model. The estimates below follow the IWG recommendations.

The SC-GHGs associated with estimated emissions from future potential development of the lease parcels are reported in **Table 15**. These estimates represent the present value (from the perspective of 2021) of future market and nonmarket costs associated with CO₂, CH₄, and N₂O emissions from potential well development and operations, and potential end-use, as described in the previous section, Proposed Action Alternative. Estimates are calculated based on IWG estimates of social cost per metric ton of emissions for a given emissions year and BLM’s estimates of emissions in each year. They are rounded to the nearest \$1,000. The estimates assume development will start in 2022 and end-use emissions complete in 2060, based on experience with previous lease sales.

Table 15. Social Cost of Greenhouse Gases Associated with Future Potential Development Under the Proposed Action Alternative				
Lifecycle Phase / Discount Rate	Social Cost of GHG (2020\$)			
	Average Value, 5% discount rate	Average Value, 3% discount rate	Average Value, 2.5% discount rate	95th Percentile Value, 3% discount rate
Development and Operations	\$57,269,000	\$203,115,000	\$301,875,000	\$592,547,000
End-Use	\$183,187,000	\$679,369,000	\$1,024,492,000	\$2,045,985,000
Total	\$240,456,000	\$882,484,000	\$1,326,367,000	\$2,638,532,000

Estimated GHG Emissions for Reasonably Foreseeable Environmental Trends and Planned Actions

The analysis of GHGs contained in this EA includes estimated emissions from those parcels being offered in this lease sale as described above. In addition to this lease sale, the BLM is offering parcels in six other BLM administrative units within the First Quarter of 2022. The estimated GHG emissions from parcels being offered in each of those individual sales is contained in the associated EA for each sale. When analyzing the potential impacts from multiple lease sales, it is important to note that it is the actual production of fossil fuel commodities on leased parcels that generates GHG emissions and not the offering of acres or parcels for lease in a particular grouping of lease sales. Parcels offered in a lease sale may or may not be sold, and sold parcels may or may not go into production for several years, if at all. Typically, lease sales in different BLM administrative units are not offered on the same date and each administrative unit has discretion to defer its sale or defer or add parcels as a result of scoping and protests. The dynamic nature of the lease sale process, and independence of each administrative unit for constructing its lease sales, precludes an analysis of potential GHG emissions that could occur from other lease sales that might occur in the same quarter. In addition, combining all of the offered parcels from multiple lease sales that may occur over a 3-month period, assuming all acres will be sold and produce immediately, and estimating GHG emissions from development on the offered acreage based on these assumptions would result in an inflated, unrealistic quantity of estimated emissions that would not be useful to the decision maker and would not accurately inform the public of the magnitude of probable cumulative emissions and impacts.

An assessment of GHG emissions from BLM's fossil fuel authorizations, including coal leasing and oil and gas development, is included in the BLM Specialist Report on Annual GHG Emissions (referred to as Annual Report, see Chapter 5). The Annual Report includes estimates of reasonably foreseeable GHG emissions related to BLM lease sales anticipated during the calendar year, as well as the best estimate of emissions from ongoing production, and development of parcels sold in previous lease sales. It is, therefore, an estimate of cumulative GHG emissions from the BLM fossil fuel leasing program based on actual production and statistical trends.

The Annual Report provides an estimate of short-term and long-term GHG emissions from lease sale activity across the BLM. The short-term methodology presented in the Annual Report includes a trends analysis of (1) leased Federal lands that are held-by-production, (2) approved APDs, and (3) leased lands from competitive lease sales occurring over the next annual reporting cycle (12 months), to provide a 30-year projection of potential emissions from Federal lease actions over the next 12 months. The long-term methodology uses oil and gas production forecasts from the EIA to estimate GHG emissions out to 2050 that could occur from past, present, and future oil and gas development. These analyses are the basis for projecting GHG emissions from lease parcels that are likely to go into production during the analysis period of the Annual Report and represent both a hard look at GHG emissions from fossil fuel leasing and the best available estimate of reasonably foreseeable cumulative emissions related to any one lease sale or set of quarterly lease sales. **Table 16** shows the cumulative estimated GHG emissions from the development of the projected lease sale acres in 2021 using the methodology described above. The 5-year lease averages include all types of oil and gas development related leases, including leases granted under the MLA as well as other authorities, that have been issued over the last 5 years. As such, the projections made from the 5-year averages represent the potential for all types of future potential oil and gas leasing activity. However, they may also over-estimate the potential emissions from the 12-month cycle of competitive oil and gas leasing activities if the projected lease sale activity does not actually occur.

Table 16. Reasonably Foreseeable Projected Emissions		
State (BLM Administrative Unit)	Annual GHG Report Projected Lease Acres 2022	Annual GHG Report GHG Emissions from Projected Lease Acres 2022 (Mt CO ₂ e per year)
Alabama (ES)	1	0.00
Alaska	356,021	9.33
Arkansas (ES)	536	0.04
California	184	0.02
Colorado	67,268	10.21
Idaho	1,881	0.03
Kansas (ES)	287	0.02
Kentucky (ES)	37	0.01
Louisiana (ES)	9,334	2.59
Michigan (ES)	5,006	0.17
Mississippi (ES)	2,609	0.06
Montana	60,807	2.48
Nebraska (WY)	19	0.01
Nevada	155,583	0.29
New Mexico	38,926	22.90
North Dakota (MT)	2,477	0.07
Ohio (ES)	681	0.18
Oklahoma (NM)	2,052	0.05
South Dakota (MT)	1,543	0.02
Texas (NM)	1,602	0.09
Utah	141,832	9.13
West Virginia (ES)	42	0.01
Wyoming	562,985	88.87
TOTAL	1,411,713	146.56

Partial Leasing Alternative

All descriptions provided above for the Proposed Action are applicable for this alternative discussion except for the BLM Colorado lease sale specific emissions and SC-GHG estimates that are based on the Colorado parcel acreage being offered under the Proposed Action Alternative. For this alternative, GHG emissions are derived in **Table 17, Table 18, and Table 19**, are calculated using the same methodology as described for the Proposed Action emissions, and are based on acreage shown in **Table 4**. Potential GHG emissions from the Partial Leasing Alternative could result in GHG emissions of 2.53 Mt CO₂e over the life of the lease. Compared to emissions from other existing and foreseeable Federal oil and gas development, the life-of-lease emissions for this alternative are between 0.19% to 0.85% of Federal fossil fuel authorization emissions in Colorado and between 0.02% to 0.06% of Federal fossil fuel authorization emissions in the Nation. The projected average annual GHG emissions from expected development following the proposed lease sale are equivalent to 14,098 gasoline-fueled passenger vehicles driven for 1 year, or the emissions that could be avoided by operating 13 wind turbines as an alternative energy source or offset by the carbon sequestration of 79,086 acres of forest land.

Table 17. Estimated Life-of-Lease Emissions (On-site) from Well Development and Production Operations Associated with the Partial Leasing Alternative (tonnes)					
Activity	CO ₂	CH ₄	N ₂ O	CO ₂ e (100-year)	CO ₂ e (20-year)
Well Development	45,297	21.90	0.360	46,048	47,202
Production Operations	484,619	8,643.88	1.080	742,501	1,198,034
Source: BLM Lease Sale Emissions Tool					

Table 18. Estimated Life-of-Lease Indirect Emissions from End-Use Combustion of Produced Oil and Gas Associated with the Partial Leasing Alternative (tonnes)						
Fluid Mineral	EUR (barrels [bbl] or thousand cubic feet [mcf])	CO ₂	CH ₄	N ₂ O	CO ₂ e (100-year)	CO ₂ e (20-year)
Oil	2,001,077 bbl	864,533	34.79	6.96	867,470	869,303
Gas	16,021,479 mcf	872,202	16.44	1.64	873,141	874,007
Total End-Use	--	1,736,735	51.23	8.60	1,740,611	1,743,310
Source: BLM Lease Sale Emissions Tool						

Table 19. Estimated Direct and Indirect Emissions from Lease Parcels Associated with the Partial Leasing Alternative on an Annual and Life-of-Lease Basis (tonnes)					
Timeframe	CO ₂	CH ₄	N ₂ O	CO ₂ e (100-year)	CO ₂ e (20-year)
Annual Maximum	507,424	292.31	2.562	514,259	525,110
Annual Average	58,119	223.51	0.258	64,850	76,629
Life-of-Lease	2,266,651	8,717.02	10.043	2,529,160	2,988,547
Source: BLM Lease Sale Emissions Tool					

The SC-GHG associated with estimated emissions from future potential development of the lease parcels under the Partial Leasing Alternative are reported in **Table 20**. These SC-GHG estimates are calculated using the same methodology as described for the Proposed Action.

Table 20. Social Cost of Greenhouse Gases Associated with Future Potential Development Associated with the Partial Leasing Alternative				
Lifecycle Phase / Discount Rate	Social Cost of GHG (2020\$)			
	Average Value, 5% discount rate	Average Value, 3% discount rate	Average Value, 2.5% discount rate	95 th Percentile Value, 3% discount rate
Development and Operations	\$10,319,000	\$35,429,000	\$52,288,000	\$103,053,000
End-Use	\$23,550,000	\$85,802,000	\$128,964,000	\$257,554,000
Total	\$33,869,000	\$121,231,000	\$181,252,000	\$360,607,000

No Action Alternative

Under the No Action Alternative, the parcel(s) would not be leased, and no new foreseeable oil and gas development would occur on the subject lease parcels. As a result, no new GHG emissions from the

development of these lease parcels would occur and no emissions from development activities on the parcels would contribute to National and global GHG emissions that influence climate change.

EIA studies regarding short-term “supply disruptions” suggest that reducing domestic supply (in the near-term under the current supply / demand scenario) would lead to the import of more oil and natural gas from other countries, including countries with lower environmental and emission control standards than the United States. The EIA 2021 long-term Annual Energy Outlook for the high U.S. domestic natural gas supply scenario describes a potential 1.2% growth in natural gas-related GHG emissions for the power sector through year 2050 and an almost 3% decline in coal-related emissions over the 30-year period. For the EIA projected low oil and gas supply scenario, power sector-related GHG emissions are reduced for both natural gas and coal through the period, though at a smaller relative percentage for coal, resulting in coal-related emissions still being higher than those associated with natural gas at year 2050 (EIA 2021).

Mitigation Strategies

GHG emissions contribute to changes in atmospheric radiative forcing that result in climate change impacts. GHGs act to contain solar energy loss by trapping longer-wave radiation emitted from the Earth's surface and act as a positive radiative forcing component. The buildup of these gases has contributed to the current changing state of the climate equilibrium towards warming. Chapters 8 and 9 of the Annual Report provide a detailed discussion of climate change science, trends, and impacts. The relationship between GHG emissions and climate impacts is complex, but a project’s potential to contribute to climate change is reduced as its net emissions are reduced. When net emissions approach zero, the project has little or no contribution to climate change. Net-zero emissions can be achieved through a combination of controlling and offsetting emissions. Emission controls (e.g., vapor recovery devices, no-bleed pneumatics, leak detection and repair, etc.) can substantially limit the amount of GHGs emitted to the atmosphere, while offsets (e.g., sequestration, low carbon energy substitution, plugging abandoned or uneconomical wells, etc.) can remove GHGs from the atmosphere or reduce emissions in other areas. Chapter 10 of the Annual Report provides a more detailed discussion of GHG mitigation strategies.

The Federal government has issued regulations that will reduce GHG emissions from any development related to the proposed leasing action. These regulations include the New Source Performance Standard for Crude Oil and Natural Gas Facilities (49 CFR 60, Subpart OOOOa), which imposes emission limits, equipment design standards and monitoring requirements on oil and gas facilities.

The State of Colorado also regulates GHG emissions from oil and gas facilities that support State GHG reduction goals under the following regulations:

- Air Quality Control Commission (AQCC) Regulation No. 7, Control of Ozone via Ozone Precursors and Control of Hydrocarbons via Oil and Gas Emissions; and
- AQCC Regulation No. 22, Colorado Greenhouse Gas Reporting and Emission Reduction Requirements.

BLM’s regulatory authority is limited to those activities authorized under the terms of the lease, which primarily occur in the “upstream” portions of natural gas and petroleum systems. This decision authority is applicable when development is proposed on public lands and BLM assesses its specific location, design, and proposed operation. In carrying out its responsibilities under NEPA, the BLM has developed BMPs designed to reduce emissions from field production and operations. BMPs may include limiting emissions on stationary combustion sources, mobile combustion sources, fugitive sources, and process emissions occurring on a lease parcel. Analysis and approval of future development may include application of BMPs within BLM’s authority, as COAs, to reduce or mitigate GHG emissions. Additional measures developed at the project development stage also may be incorporated as applicant-committed

measures by the project proponent or added to necessary air quality permits. Additional information on mitigation strategies, including emissions controls and offset options, are provided in the Annual GHG Report.

3.3.3 ISSUE 3: HOW WOULD LEASING POTENTIALLY AFFECT NATIVE AMERICAN CULTURAL INTERESTS?

Affected Environment

The RGFO (Rocky Mountain District) is in the process of consulting with the following tribes: Apache Tribe of Oklahoma, Cheyenne and Arapaho Tribes of Oklahoma, Cheyenne River Sioux Tribe, Comanche Nation of Oklahoma, Crow Creek Sioux, Eastern Shoshone, Jicarilla Apache Nation, Kiowa Tribe of Oklahoma, Northern Arapaho Tribe, Northern Cheyenne Tribe, Ute Indian Tribe of the Uintah & Ouray Reservation, Oglala Sioux Tribe, Pawnee Tribe, Rosebud Sioux Tribe, Southern Ute Tribe, Standing Rock Lakota Tribe, and the Ute Mountain Ute Tribe. Numerous Tribes have already expressed concerns about the parcels located in Las Animas County and the PNG Parcels. The BLM is continuing to engage with and respond to the Tribes.

Environmental Consequences

Proposed Action Alternative

Tribal consultation is ongoing. The area of potential effects in Las Animas County is considered to be an important cultural landscape for some Tribes. Other Tribes have identified many sites of importance, and have been working for decades with other Federal entities to record and protect them. In addition, a traditional use study is in progress adjacent to a portion of the area of potential effects, where a known historic property exists. Many of the Tribes support deferral of the parcels until adequate identification and analysis can be conducted.

Partial Leasing Alternative

This alternative would not include Las Animas and PNG parcels from the present lease sale; and would allow the RGFO to complete Tribal consultation for those parcels and work with the Tribes to determine a strategy for addressing the concerns associated with those lands. In addition, the BLM is considering a proactive cultural resource inventory strategy in the ongoing Eastern Colorado RMP revision process. If these parcels are deferred, the BLM would have an opportunity to include them in any appropriate management identified in the new RMP when that process is complete.

No Action Alternative

Under the No Action Alternative, the proposed parcels would not be leased. There would be no impacts from oil and gas development on landscapes, sites, or locations of concern to Tribes.

Mitigation Strategies

This is not yet fully determined.

3.3.4 ISSUE 4: HOW WOULD LEASING POTENTIALLY AFFECT CULTURAL RESOURCES? (RGFO AND PNG)

Affected Environment

Parcels in the NWD have a CSU stipulation applied to protect cultural resources; in addition, a LN stipulation would apply to the KFO parcel, as described in **Appendices A and B**. Thus, the NWD parcels are not analyzed in detail for cultural resources as noted in **Table 3**.

A literature review of previously recorded cultural resources associated with parcels located in the RGFO jurisdiction resulted in the identification of one site listed on the NRHP along with 63 sites that are potentially eligible for the NRHP (in Las Animas County). Because only 0.04% of the land surface of Las Animas County parcels have been inventoried for cultural resources, site density on the remaining 99.96% of the acreage is expected to be very high. Additionally, the northernmost parcels adjoin the Piñon Canyon Maneuver Site (PCMS), which has been fully inventoried, and site density has been demonstrated to be very high. The BLM has received letters and emails of concern from the NEPA & Cultural Management Branch of the Directorate of Public Works Environmental Division of the U.S. Army Garrison, Fort Carson, and from the Colorado Council of Professional Archaeologists. Approximately 16% of the surface of the PNG parcels has been inventoried, with a total of four sites that are either eligible or potentially eligible for the NRHP.

Environmental Consequences

Proposed Action Alternative

A large number of potential historic properties are already identified in the area of potential effects for the proposed undertaking, and it is anticipated that many more are present. The PNG parcels would have an NSO stipulation, so development would have to occur from off-lease surface locations. The effect of the present undertaking on such off-lease sites that might be indirectly impacted by the lease sale is unknown. However, if oil and gas resources are accessed directionally or horizontally from off-lease surface locations on private or state land, BLM's ability to ensure protection of cultural resources may be limited, especially if surface disturbance has already occurred. The BLM RGFO is addressing Tribal concerns and reviewing new archaeological information for the area prior to initiating consultation with the Colorado SHPO pursuant to Section 106 of the NHPA. The RGFO will initiate and complete the Section 106 consultation process before offering any parcel for lease.

Partial Leasing Alternative

This alternative would not include Las Animas and PNG parcels from the present lease sale, and would allow the RGFO to work with SHPO, the NEPA & Cultural Management Branch of the Directorate of Public Works Environmental Division of the U.S. Army Garrison Fort Carson, and the Colorado Council of Professional Archaeologists to determine a strategy to avoid adverse effects to historic properties on those parcels. In addition, the RGFO could implement any new management identified at the conclusion of the ongoing Eastern Colorado RMP revision process.

No Action Alternative

Under the No Action Alternative, the proposed parcels would not be leased. There would be no adverse effect from oil and gas development to historic properties.

Mitigation Strategies

This is as yet unknown.

3.3.5 ISSUE 5: HOW WOULD LEASING POTENTIALLY AFFECT THE SOCIOECONOMICS WHERE THE LEASING WOULD OCCUR?

Affected Environment

The current lease sale includes parcels in Jackson, Las Animas, Moffat, Rio Blanco, Routt, and Weld counties. Accordingly, the socioeconomic study area includes these counties and the State of Colorado as the effects of the economic activity generated by the lease sale may impact the conditions in these areas.

Northwest District (Jackson, Moffat, Rio Blanco, and Routt Counties)

In 2019, the U.S. Bureau of Economic Analysis reported Jackson County had 1,392 residents, Moffat County had 13,283 residents, Rio Blanco County had 6,324 residents, and Routt County had 25,638 residents (Headwaters 2021a). These population numbers indicate relatively little change in Moffat County compared to 2000 levels, while Rio Blanco County had a 6 percent population increase, and Routt County and the State of Colorado increased by approximately 30 percent during the same period. Jackson County lost almost 12 percent (185 people) of its population since 2000.

Agriculture is a traditional use of lands and continues to be economically important today too. Most of the farmlands are for raising livestock (U.S. Department of Agriculture [USDA], National Agricultural Statistical Service [NASS] 2019). In 2017, Jackson County had a market value of agricultural products sold of approximately \$24.5 million, while Moffat County had more than \$33.1 million, Routt County had more than \$31.6 million, and Rio Blanco County had almost \$18.8 million.

In 2019, Jackson and Routt counties had the highest percentage of travel- and tourism-related employment with 37 and 43 percent of all private employment in this sector (Headwaters Economics 2021a). Tourism is around 20 percent of private employment in Moffat County, and 13 percent in Rio Blanco County (Headwaters Economics 2021a). Most of the employment is in food services and drinking places, although Routt County also has a higher percent in accommodation employment compared to the other counties and the State of Colorado.

In 2019, mining, including oil and gas extraction, represented 28 percent of private employment in Rio Blanco County, while it was around 19 percent in Jackson County, 6 percent in Moffat, and less than 2 percent in Routt (Headwaters Economics 2021a).

Rocky Mountain District (Las Animas and Weld Counties)

In 2019, Las Animas County had just over 14,500 residents, which represents approximately a 5 percent decrease in population since 2000, while the State of Colorado grew by 31 percent (Headwaters Economics 2021b). Since 2000, Weld County has seen a growth of almost 78 percent in population, for a total of 324,492 people in 2019 (Headwaters Economics 2021b) with much of the population growth associated with increased oil and gas production. This growth has resulted in a more diverse and increasingly urban population compared to the County's rural roots. Las Animas County has been impacted by the boom-and-bust cycles from its mining heritage. For these two counties, employment in the mining sector has increased by 4,111 jobs since 1998.

In addition to natural resource extraction, agriculture is an important economic driver. In 2017, Las Animas County had 549 farms with a market value of products sold of more than \$25.8 million (USDA NASS 2019). The travel and tourism sector represents approximately 25 percent of the jobs in Las Animas County.

Many of Weld County's economic sectors have seen increased growth since 2000—at the low end, a 19-percent increase in manufacturing and wholesale trade jobs to a 68-percent increase in education

employment (Headwaters 2020). The only job losses are in the farm and information sectors. The influx of new residents and oil and gas development has put stress on Weld County's transportation infrastructure.

Environmental Consequences

Proposed Action Alternative

The direct effect of leasing and development would be the payments received from leasing all or a subset of the offered acres of Federal mineral estate. Indirect effects that might result, should exploration or development of the leases occur, could include increased employment opportunities related to the oil and gas and service support industry in the region as well as the economic contributions to Federal, State, and County governments related to lease payments, royalty payments, severance taxes, and property taxes.

Leasing mineral rights for the development of Federal minerals generates public revenue. Potential parcels approved for leasing are offered by the BLM at a minimum rate of \$2.00 per acre at the lease sale. These sales are competitive and parcels with high potential for oil and gas production often command bonus bids more than the minimum bid. In addition to bonus bids, lessees are required to pay rent annually until production begins on the leased parcel, or until the lease expires. These rental payments are equal to \$1.50 an acre for the first 5 years and \$2.00 an acre for the second 5 years of the lease.

The State of Colorado receives 49 percent of the total revenue associated with Federal mineral leases. This revenue is divided as such: 48.3 percent of all mineral lease rent and royalty receipts are sent to the State Education Fund; 10 percent of revenue is sent to the Colorado Water Conservation Board and approximately 2 percent is distributed directly to local school districts in which the revenue originates or in which oil and gas industry employees and their families reside. The remaining 40 percent of the mineral lease rent and royalty receipts are sent to the Colorado Department of Local Affairs, which then distributes half to a grant program designed to provide assistance with offsetting community impacts due to mining, and the remaining half directly to the counties and municipalities in which the Federal mineral lease revenue originates or in which oil and gas industry employees and their families reside.

Bonus payment funds received by the State of Colorado are allocated separately from rents and royalties in the following manner: 50 percent of all mineral lease bonus payments are allocated to two separate higher education trust funds, the "Revenues Fund" and the "Maintenance and Reserve Fund." The Revenues Fund receives the first \$50 million of bonus payments to pay debt service on outstanding higher education certificates of participation. The Maintenance and Reserve Fund receives 50 percent of any bonus payment allocations greater than \$50 million. These funds are designated for controlled maintenance on higher education facilities and other purposes. The remaining 50 percent of State mineral lease bonus payments are allocated to the Local Government Permanent Fund, which accumulates excess funds in trust for distribution in years during which Federal mineral lease revenues decline by ten percent or more from the preceding year.

During the lease period, annual lease rents continue until one or more wells are drilled that result in production and associated royalties. The Federal oil and gas royalties on production from public domain minerals equal 12.5 percent of the value of production (43 CFR 3103.3.1).

Past research on social impacts associated with energy development shows that social well-being often decreased during a boom, but then tended to increase once the boom is over. A comparative and longitudinal study conducted in Delta, Vernal, and Tremonton, Utah, and Evanston, Wyoming, addressed issues of social well-being in boomtowns (Brown et al. 1989, Brown et al. 2005, Greider et al. 1991, Hunter et al. 2002, Smith et al. 2001). With the exception of Tremonton, each of these communities experienced a boom during the late 1970s and early 1980s. Delta's boom resulted after the construction of

a power plant while the booms in Evanston and Vernal were primarily related to oil and gas development. At least four surveys were conducted in these communities from 1975 to 1995. Several indicators of social well-being were examined, including perceived social integration, relationships with neighbors, trust of community residents and community satisfaction. Delta and Evanston showed similar patterns associated with these indicators. During the peak boom years, residents experienced diminished perceived social integration, relationships with neighbors, trust of residents, and community satisfaction. Interestingly, Brown and others (2005) pointed out that the greatest declines in community satisfaction in Delta occurred just before the largest population increase of the 20-year study period, indicating that changes in population cannot alone account for shifts in community satisfaction and social integration. Nonetheless, by 1995, the levels of these indicators had returned to or exceeded pre-boom levels.

Another 2011 study highlights several of the changes that have been seen across the Bakken oil counties and the impacts to quality of life (Bohnenkamp et al. 2011). For example, the study highlights that the familiarity of residents with other residents and the safety often felt in small rural communities has shifted to in-migration of new people and safety concerns resulting from not knowing these people. The study also highlights concerns over housing prices and values increasing and the changing of the population. While there is an in-migration of people for oil field jobs, there has also been an out-migration of long-time residents due to not being able to afford the rising housing costs (Bohnenkamp et al. 2011).

The proximity of oil and gas wells and related facilities can influence nearby residential property sales. Several studies have attempted to estimate how property values are impacted by nearby oil or gas exploration, drilling, and production. See Krupnick and Echarte (2017) for a summary of recent studies. In general, these studies find that, at the time of sale, the presence of oil and gas wells near the property reduces the property value relative to what it would have sold for without a nearby well. Unfortunately, the explicit and implicit assumptions used in these estimates (such as the maximum distance for a ‘nearby well’) vary a great deal from study to study, as does the size of the price impacts, which range from zero to negative 37 percent (Krupnick and Echarte 2017).

Several studies have found who owns the mineral rights is a possible source of property value differences. Split estates are when landowners do not own mineral rights but may be subject to Federal mineral development on their land. In one study (Boslett et al. 2016), property value estimates tended to be significantly lower in a Colorado region where the minerals were owned by the Federal government compared to other areas where a comparable property was located above a non-Federal mineral estate. Usually, split estate landowners enter into a surface use agreement with the developer and receive compensation, i.e., income, for the use of their land. Estimates of how individual properties are affected by nearby oil and gas development vary from case to case depending on specific location and the exact character and features of a property.

Multiple studies identify concerns about the possible environmental impacts associated with oil and gas exploration and development as one reason for property value differences. But these concerns (and their influence on prices) can be tempered. Roddewig and Cole (2014) states that “(p)ast real estate market studies indicate that investigation and remediation can limit price and value impacts from oil and gas contamination.” Note that the BLM actively investigates and seeks remediation of oil and gas contamination resulting from production activities on Federal land or involving Federal minerals.

Current research provides little information on how long these price impacts persist. In a study in Weld County, Colorado, Bennett and Loomis (2015) estimate a one percent decrease in urban house prices for every well being drilled within one-half mile “during the time the buyer is deciding upon buying the house,” but “(o)nce the well moves out of active drilling and into becoming a producing well, all our models show there is no statistically significant negative effect on house prices.”

Oil and gas exploration, drilling, or production may increase traffic and traffic delays, noise, and visual impacts. Increased truck traffic hauling heavy equipment, hydraulic fracturing fluids, and water, as well as increased traffic associated with oil workers and increased populations, could cause more traffic congestion, increase commuting times, and affect public safety. However, it is unknown when, where, how, or if future surface disturbing activities associated with oil and gas exploration and development, such as well sites, roads, facilities, and associated infrastructure, would be proposed. It is also not known how many wells, if any, would be drilled and/or completed, what types of technologies and equipment would be used, and what types of infrastructure would be needed for production of oil and gas. Areas with higher development potential, such as in Weld County, are more likely to experience these impacts.

Reasonably Foreseeable Trends and Planned Actions

Any possible future development of fluid mineral resources resulting from this lease sale, together with current oil and gas development, could generate the economic and social impacts described in the Proposed Action Alternative. See discussion in **Section 3.3.2**. The magnitude of these types of socioeconomic effects would depend on the level and pace of development of individual parcels. The Weld County parcels are more likely to be developed than the other parcels under consideration in the Proposed Action due to proximity to other existing development and high development potential.

Partial Leasing Alternative

As shown in **Table 4**, potential impacts from future development as described in the previous section could occur in Jackson, Moffat, Rio Blanco, and Weld counties.

No Action Alternative

Under the No Action Alternative, the proposed parcels would not be leased. Public revenues would not be generated through bonus bids paid at the lease auction. Annual rents would not be collected on leased parcels not held by production. There would be no anticipated impacts from oil and gas development to socioeconomics beyond existing impacts.

Mitigation Strategies

The type, magnitude, and duration of potential impacts cannot be precisely quantified at this time. Any future drilling activity requires an APD and requisite NEPA analysis, which would include consideration of socioeconomic impacts that could be associated with the disturbance and drilling on the specific parcel. Mitigation would be determined if leased parcels are proposed for development at that time.

3.3.6 ISSUE 6: WOULD LEASING DISPROPORTIONATELY OR ADVERSELY AFFECT ENVIRONMENTAL JUSTICE POPULATIONS?

Affected Environment

EO 12898 states, “each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations...” The purpose of EO 12898 is to identify and address, as appropriate, disproportionately high, and adverse human health or environmental effects on low-income populations, minority populations, or Indian Tribes that may experience common conditions of environmental exposure or effects associated with a plan or project. A review of U.S. Census Bureau 2019 data (Headwaters 2021a and 2021b) indicates that only Las Animas County meets the BLM’s meaningfully greater criteria when compared to the State of Colorado’s percentage of the population identified as low income or minority.

Environmental Consequences

Proposed Action Alternative

No surface-disturbing activities are associated with a lease sale; therefore, direct impacts from the lease sale would not disproportionately or adversely affect environmental justice populations. While leasing is one of the steps necessary for potential future oil and gas development of Federal minerals to occur, due to energy market volatility and the dynamics of the oil and gas industry, it is not feasible to predict the exact effects of the leasing action, as there are no guarantees that the leases will receive bids, that any leased parcels will be explored, or that exploration will result in discovery of viable fluid mineral production. The BLM does not know when, where, how, or if future surface-disturbing activities associated with oil and gas exploration and development, such as well sites, roads, facilities, and associated infrastructure, would be proposed. Nor does the BLM know how many wells, if any, would be drilled and/or completed, the types of technologies and equipment that would be used, and the types of infrastructure needed for production of oil and gas. The BLM will conduct additional NEPA analysis on site-specific impacts, including on environmental justice issues, if an APD is submitted.

As noted in **Sections 1.6, 3.3.3, and 4.2**, the BLM is consulting with Tribes to solicit information on potential issues and concerns for consideration in the environmental analysis. As noted in **Section 3.3.3**, numerous Tribes have already expressed concerns about the parcels located in Las Animas County and the PNG Parcels. The BLM is continuing to engage with and respond to the Tribes. Additionally, the BLM has considered all input from persons or groups regardless of age, income status, race, or other social or economic characteristics.

Reasonably Foreseeable Trends and Planned Actions

Any possible future development of fluid mineral resources resulting from this lease sale would be in addition to current levels of development (see discussion in **Section 3.3.2**).

Partial Leasing Alternative

Deferral of Las Animas County and PNG parcels would allow additional time to discuss with Tribal governments their concerns and potential mitigation options. See more detailed discussion in **Sections 3.3.3 and 3.3.4**.

No Action Alternative

Under the No Action Alternative, the proposed parcels would not be leased. There would be no anticipated impacts from oil and gas development to environmental justice populations other than from existing oil and gas development.

Mitigation Strategies

If appropriate, mitigation would be determined if leased parcels are proposed for development.

3.3.7 ISSUE 7: HOW WOULD LEASING POTENTIALLY AFFECT VISUAL RESOURCES? (RGFO)

Affected Environment

Parcels in the NWD that lie in lands managed with VRM Class objectives have stipulations applied in conformance with their associated RMPs, as described in **Appendices A and B**, and are not analyzed in detail as noted in **Table 3**.

A visual resource inventory (VRI) was conducted for the RGFO in 2015. The proposed lease parcels within Las Animas County and Weld County were inventoried for visual resource values. The inventory revealed that the proposed parcels in Las Animas County are in a broad, expansive area with minimal landform variation and distant views of the Spanish Peaks. Vegetation throughout the area consists primarily of sagebrush, pinyon, juniper, cholla cactus, and grasses. Ranching and agricultural heritage is important to the quality of life and related tourism. Recreationists have little access due to limited public land. Opportunities offered include wildlife viewing, hunting, and scenic driving.

The Weld County area has a large, expansive flat to rolling landform with limited vegetation consisting mostly of grasslands and localized clusters of trees. Wind turbines are prominent in this area. Working ranches and rural residences comprise the area's landscape. There has been an increased concern in landscape integrity as oil and gas development has occurred.

The VRI was done at a broad, field office-wide scale. The inventory identified the presence of contrasts with the natural environment, such as scattered and isolated ranches, homes, railroads, and power lines. Human disturbance in the form of ranching activity is the main noticeable impact. When looking at the specific project area, a large tract of private land has remained intact over the years.

VRM classes, along with the corresponding VRM objectives, were established in the RGFO in 1996 with the approval of the Royal Gorge Resource Area RMP. Visual Resource Management objectives corresponding to the various management classes provide standards for analyzing and evaluating proposed projects. Projects are evaluated using the Contrast Rating System to determine if it meets VRM objectives established by the RMP.

Nearly all of Las Animas County project area parcels are located on split-estate lands (private or State surface), where the BLM does not manage surface uses. However, the surrounding public lands were evaluated in the VRI as Class II areas. The Class II management objective is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape. Most of the parcels are found within the Class II areas with a portion in a Class IV area. Class IV management allows for activities that require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. Every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements.

The main viewshed for the casual observer in Las Animas County is from US Highways 160 and 109, where all parcels adjacent to the highways are part of Class IV management. Other observation points for the majority of the parcels are accessed by rural county routes. Parcels on areas of high sensitivity are adjacent to the Comanche National Grasslands located on the Pinon Canyon Military Reservation, which is inaccessible to the public.

The Weld County parcel outside of the PNG is located on private surface land 6 miles from the Pawnee Pioneer Trails Scenic Byway. However, this location is in an area identified as less sensitive to change and a Class IV area, where modifications to the landscape are common.

Environmental Consequences

Proposed Action Alternative

For the areas proposed for leasing, the Proposed Action Alternative of leasing the parcels would not change the existing landscape. However, if the lease were to go into production in areas that already have high levels of human modification, the proposed action would introduce visual contrasts but at limited levels given the context of the project area, the level of existing development, and the use of BMPs. If leases were developed, structures associated with this activity could be introduced on the landscape such as roads, pads, buildings, and equipment, potentially creating contrasts in form, texture, color, and line at varying levels. These effects would be evaluated later at the APD stage.

For parcels located near the Comanche National Grasslands or within the immediate vicinity, impacts would be noticeable depending on placement of structures.

Reasonably Foreseeable Trends and Planned Actions

Any subsequent development associated with the lease would contribute additional contrasts to the environment. In areas where viewers are more sensitive to change, such as near the Comanche National Grasslands, the changes associated with oil and gas development would be seen as an incremental impact on visual resources and the overall character of the area. This project would add to the overall cumulative impact on visual resources in these areas.

Partial Leasing Alternative

This alternative includes one parcel in Weld County within the RGFO; and, if leased, the existing landscape would not change. However, if the lease were to go into production, the visual landscape in this area would change with the additional disturbance. The proposed Parcel 130 is in an area that already has high levels of human modification. This alternative would introduce visual contrasts but at limited levels given the context of the area.

No Action Alternative

Under the No Action Alternative, the proposed parcels would not be leased. There would be no visual impacts to the landscape from Federal oil and gas development beyond those existing.

Mitigation Strategies

The BMPs could include painting equipment a proper color that blends with the environment and locating facilities, so they are away from ridges and mesas, are screened from nearby residences, and decrease visual contrasts with the natural landscape. Considering the areas are split estate, where BLM does not direct surface uses, and there is less development, these contrasts would most likely be more readily noticeable due to the lack of other structures or human modifications in the area. BMPs would also be applied to reduce these impacts.

3.3.8 ISSUE 8: HOW WOULD LEASING POTENTIALLY AFFECT BIG GAME MIGRATION CORRIDORS AND WINTER RANGE WHERE LEASING WOULD OCCUR? (KFO, LSFO, RGFO, AND WRFO)

Affected Environment

The leases offered in this sale contain a variety of big game habitats, from summer range and calving (production) areas to winter range and concentration areas to severe winter range and migration corridors used by Rocky Mountain bighorn sheep, elk, mule deer, and pronghorn to connect these habitats.

Southern Las Animas County provides production areas and important winter habitat for Rocky Mountain bighorn sheep. These bighorn sheep inhabit an area that has unique geographical features, has experienced minimal development, and contains large tracts of undisturbed habitat. Purgatoire Canyon and Chacuaco Canyon provide high quality habitat for bighorn sheep, and the area where the two canyons converge supports one of the largest herds in Colorado.

Across Colorado, big game habitat varies widely in character from arid, lower-elevation juniper-dominated woodlands and intermixed stands of Wyoming big sagebrush to mountain shrub-dominated sagebrush shrublands at middle elevations to higher elevations that are composed of woodlands that contain larger fractions of pinyon pine to spruce-fir and aspen stands. Woodlands and adjacent mountain shrub or big sagebrush communities generally possess well-developed herbaceous understories. The most important role that sagebrush/saltbush complexes are likely providing is early emerging (e.g., March) herbaceous forage to big game – an important component in regaining an elevated nutritional plane for subsequent birthing and lactation. Important elk seasonal range tends to be distributed in patterns similar to, but not identical with deer.

CPW designates priority habitat types (e.g., winter range; calving/fawning/lambing areas) for big game species throughout the proposed leasing area. Mule deer winter concentration areas and severe winter range, and elk migration corridors, production areas, winter concentration areas, and severe winter range are designated as Big Game HPH and are important for species conservation. The winter range of a species is defined as the subset of the overall species range where 90 percent of individuals reside, on average, over 5 of 10 previous winters from the first heavy snowfall until spring green-up. Winter range may also be defined by a site-specific period of winter as defined for each local data analysis unit.

Big game animals generally migrate to lower elevations during winter months to access food, cover, and shelter from cold temperatures and snow accumulation (Webb et al. 2013), and pronghorn antelope are known to migrate hundreds of kilometers to access favorable winter range conditions (Collins 2016). Winter range is an important factor when considering big game management, as it has been shown to have the potential to impact population dynamics through altering survival and reproduction (Sawyer et al. 2006). Due to the difficult conditions big game species, such as pronghorn, are faced with in winter, such as food limitation and increased energy expenditures, they rely heavily on winter range for survival (Taylor et al. 2016). Additionally, the winter range component usually comprises a small percentage of overall big game home ranges and may be a limiting factor for populations in this regard (Watkins et al. 2007). Therefore, changes to winter range have high potential to impact big game populations due to its relative scarcity and its importance to survival and reproduction (Collins 2016; Webb et al. 2013; Taylor et al. 2016). In northwest Colorado, the Bear's Ears and White River mule deer and elk herds are among the most migratory of deer and elk herds in Colorado. A significant proportion of each herd migrates 60 to 70 miles in spring and fall. The migratory pattern is primarily east-west, with summer ranges in the upper reaches of the Yampa and White River drainages near the Continental Divide and winter ranges west to within about 30 miles of the Colorado-Utah State line.

In conformance with the field office RMPs, parcels in the NWD have TLs applied within big game winter range and concentration areas, severe winter habitat, and production areas for the protection of big game habitats, as well as CSUs and LNs for high-value wildlife habitats and priority sagebrush habitats.

The BLM recently developed LN CO-57 to alert potential lessees and operators of the requirement to work with the BLM and coordinate with CPW to take reasonable measures (see 43 CFR 3101.1-2) to avoid and minimize impacts to big game migration corridors and big game winter range.

The BLM coordinates with CPW to create master development plans and wildlife mitigation plans as operators develop oil and gas fields. When APDs are submitted, the BLM cooperates with CPW to determine the need for additional mitigation, COAs, and design features.

Environmental Consequences

Proposed Action Alternative

In the Proposed Action Alternative, the act of leasing the parcels for oil and gas development would have no direct impact on wildlife resources; however, activities at the development stage could have impacts on wildlife, including big game use of migration corridors and priority ranges. The magnitude and location of direct and indirect effects cannot be predicted until the site-specific development stage; therefore, specific impacts to terrestrial wildlife caused by potential future development cannot be analyzed with accuracy prior to leasing.

Researchers have reported avoidance distances of pronghorn varying from 0.25 mile (Autenrieth 1983) to 0.6 mile (Easterly et al. 1992) from sources of disturbance. Based on a radio telemetry study in the Pinedale Anticline of Western Wyoming, Berger et al. (2006) determined pronghorn avoided denser well fields associated with significant activity. Pronghorn consistently avoided areas within 100 meters of natural gas well pads. During a 15-year, 171-animal radio collar study assessing the effects of energy development on pronghorn movement patterns and habitat use in the Greater Yellowstone Ecosystem, Sawyer et al. (2019) found that pronghorn increased avoidance distances from well pads by an average of 408 meters, with the final year of the study seeing an increased avoidance distance of 800 meters. Additionally, Sawyer notes that the time pronghorn spent in the study area near well pads decreased by 22 percent (about one month) over the 15-year study, and the percentage of pronghorn leaving the study area increased by 52 percent. Sawyer (2019) concludes that these metrics indicate that pronghorn response to energy development involved avoidance of infrastructure and partial abandonment of their winter range.

These findings are problematic for the survival of pronghorn herds near energy development that takes place near their winter range, due to the dependence of pronghorn on this habitat type for survival (Taylor et al. 2016). Additionally, detrimental effects of energy development have the potential to be compounded in years of harsh winter conditions (low temperatures and heavy snow loads), because pronghorn are more likely to migrate to and rely on winter ranges in these years (Collins 2016). Portions of lease parcels in this proposal encompass pronghorn antelope winter range and are therefore subject to the lease stipulation CO-09 to protect pronghorn winter habitat. However, currently, it is not possible to determine the effects of development due to the specific locations being unknown. More specific effects of development on pronghorn winter habitat will be determined at the APD stage, and the BLM may require that proposed development be relocated if supported by site-specific analysis.

For bighorn sheep, studies have shown avoidance of habitats disturbed by construction, road development, vehicle traffic, and impacts from aircraft over flights (Hebblewhite and Merrill 2008). A summary of ungulates in Montana reported that, of all the ungulate species studied, bighorn sheep appear to be the most vulnerable to impacts from human disturbance (Canfield et al. 1999). In southern Las Animas County, the 40 proposed parcels in this sale cover 65,660 acres and include some overlap with production areas and important winter habitat for Rocky Mountain bighorn sheep. Therefore, these leases are subject to lease stipulations CO-09 and CO-12 to mitigate impacts to these areas.

Impacts of development activities can be divided into general categories: 1) direct and indirect loss of habitat; 2) physiological stress; 3) disturbance and displacement; 4) habitat fragmentation and isolation; and 5) other secondary (offsite) effects (Lutz et al. 2011). Potential future development of some or all of the parcels includes direct habitat loss due to habitat removal or modification, indirect habitat loss due to wildlife avoidance of areas of intensive operations (especially construction, drilling, and completions),

habitat fragmentation by breaking larger tracts of habitat into smaller tracts as a result of either habitat loss or avoidance, and interference with daily or seasonal movements, including seasonal migrations. A less frequent impact is direct mortality, mostly associated with collisions with project-related vehicular traffic. The extent of indirect habitat loss varies by the type, duration, and timing of the disturbance, and the amount of screening provided by vegetation and topography. The generally lower density of well pads associated with modern types of oil and gas developments, consisting of fewer pads with more wells having longer lateral reaches, would reduce impacts from direct habitat loss or fragmentation and interference with movement patterns of big game ungulates. Initial disturbance to wildlife (e.g., construction, drilling, and completion activities) would be relatively localized and temporary. After the initial activities subsided, human activity and the effects of deer/elk avoidance behavior would continue at reduced levels through the life of well or field.

Demonstrated widely for big game since the 1970s (Rost and Bailey 1979) and more precisely defined with Global Positioning System (GPS) technology (e.g., Preisler et al. 2006) is the tendency for animals to avoid human disturbance, which is most commonly associated with higher-intensity well and pad development activities and vehicular access. Though some big game populations may be more resilient to development in some landscapes, impacts and avoidance will occur at some level of development. Mule deer selected sites for sagebrush production, but that use decreased closer to disturbance (Dwinnell et al. 2019), and deer consistently avoided energy infrastructure and used habitats that were up to about 900 meters further from well pads as compared to predevelopment patterns of use (Sawyer et al. 2017). Avoidance of human activity, regardless of form, has important ramifications on big game energetics (e.g., avoidance movements, heightened state of alert) (Geist 1978) and nutrition (e.g., reduced time foraging and access to available forage, displacement from preferred foraging sites that, in turn, have consequences on fitness and performance, such as survival and reproduction, at the individual and population level). As effective forage availability becomes increasingly constrained by direct removal or avoidance response, and animal use is incrementally relegated to smaller proportions of more optimal seasonal range, it is inevitable that the capacity of the range to support former numbers of animals would deteriorate, and eventually increase the probability of density-dependent adjustments in animal abundance (Bartmann et al. 1992).

Protections in the form of stipulations, in combination with COAs and other mitigation measures identified through site-specific NEPA review of future proposed oil and gas projects, as well as coordination with CPW to develop permit COAs, would help avoid or minimize impacts to seasonally important or HPH and other habitat used by big game species.

Reasonably Foreseeable Trends and Planned Actions

The most important cumulative aspect of lease development is the accumulation of persistent disturbances and the subsequent indirect loss of habitat utility on big game seasonal ranges. Although impossible to predict with specificity, development of these leases would contribute incrementally to ongoing and future forms of human activity across the landscape, as described in the RMP EISs.

Development of one or more of the proposed lease parcels would contribute to impacts to big game species from other ongoing mineral development as well as other land uses such as the development of rights-of-way, recreational uses, and wildfire. Oil and gas development would result in further unavoidable and long-term modifications and reductions in slow-to-develop woodland or shrubland communities as wildlife forage and cover. Roads and working pad surfaces would represent an incremental accumulation of acreage removed from terrestrial wildlife habitat. The interim and final reclamation procedures required by the BLM would be expected to provide a foundation for the successional development of native shrubland and woodland communities and over the long-term help redevelop functional wildlife habitat.

Partial Leasing Alternative

Like the Proposed Action Alternative, the act of leasing the parcels for oil and gas development would have no direct impact on wildlife resources; however, activities at the development stage could have impacts on wildlife, including big game use of migration corridors and priority ranges. The magnitude and location of direct and indirect effects cannot be predicted until the site-specific development stage; therefore, specific impacts to terrestrial wildlife caused by potential future development cannot be analyzed with accuracy prior to leasing.

If developed, the parcels proposed in this alternative that overlap with big game habitats would result in impacts similarly described in the Proposed Action Alternative. However, in the Partial Leasing Alternative, all parcels intersecting bighorn sheep lambing areas and winter range and the majority of parcels that overlap with big game migration corridors and HPH would be deferred. Therefore, no impact to bighorn sheep is anticipated. Impacts to big game migration corridors and big game in HPH would be limited to the parcels, which would be subject to TLs to reduce adverse effects on big game.

No Action Alternative

The No Action Alternative would not directly or indirectly affect big game resources. However, big game resources would be affected by the continuation of current land and resource uses on or near the parcels. The No Action Alternative may reduce or delay Federal impacts to wildlife migration corridors from potential oil and gas development associated with the lease parcels. However, oil and gas development may occur at a later time or another location, which may affect wildlife migration corridors.

Mitigation Strategies

Any future oil and gas development of the parcels would undergo site-specific NEPA analysis, using detailed project information from the SUPO, additional information provided by CPW, and biological surveys, as needed. Oil and gas field development should be designed to conserve sufficient areas of spatially and temporally variable forage resources along migration routes to allow big game to behaviorally compensate for changing climate and resource patterns (Searle et al. 2015). Additionally, a biological inventory may be requested to gather baseline information, and the BLM may require an operator to move an operation and/or delay development activity to protect valuable wildlife resources if supported by inventories and site-specific NEPA analysis for the development activity.

Consistent with DOI Secretary's Order No. 3362, "Improving Habitat Quality in Western Big-Game Winter Range and Migration Corridors" (February 9, 2018), LN CO-57 was developed in consultation with CPW in order to protect areas identified as wildlife migration corridors and priority winter habitats. With the application of the LN, the BLM would avoid or minimize the long-term loss or adverse modification of effective cover types via vegetation clearing or infrastructure occupation at the potential Federal lease development stage by requiring the lessee or the designated operator "to work with the BLM and coordinate with Colorado Parks and Wildlife to take reasonable measures (see 43 CFR 3101.1-2) to avoid and minimize impacts to maintain big game migration corridors and winter range functionality." Big game seasonal migration corridors and winter range are mapped in the RMPs, BLM's GIS database, and other maps provided by local, State, Federal, or Tribal agencies that are analyzed and accepted by the BLM. The BLM would minimize the density and use-frequency of well access roads and limit routine and scheduled activity to timeframes outside sensitive periods for big game. Additionally, the BLM would continue to evaluate the sufficiency of leasing stipulations to protect wildlife migration corridors and winter range, in cooperation with CPW. Conserving habitats that provide high-quality forage and refuge, while maintaining connectivity along migration routes by concentrating development in areas of lesser value to big game, could be achieved through early planning and coordination that identify areas for both habitat conservation and thoughtful development.

Prior to approving new disturbance, the BLM may also approve a Master Development Plan for the proposed parcels. Such a plan would consolidate facilities and manage well pad and road densities in high priority big game habitats and bighorn sheep-occupied range within the leased area.

Mitigation measures that may be applied to projects to supplement lease stipulations include a variety of COAs to:

- Reduce habitat loss, modification, fragmentation, and interference with migration by careful planning of well pad sizes and locations, such as through clustering and phasing.
- Minimize transport of sediments or chemical pollutants into surface waters by requiring rapid containment and mitigation of any spills or accidental releases.
- Emphasize pipelines instead of trucks to transport water used or produced by the project.
- Minimize noise impacts from well pads and other surface facilities during long-term operations.
- Minimize the generation of fugitive dust.
- Require prompt and effective reclamation of temporarily disturbed areas using native species.
- Locate projects along existing access roads and in proximity to existing oil and gas development to reduce the potential for impacts on wildlife, or cluster the disturbance rather than disperse it across a landscape.

3.3.9 ISSUE 9: HOW WOULD LEASING POTENTIALLY AFFECT GREATER SAGE-GROUSE HABITAT? (KFO, LSFO, AND WRFO)

Affected Environment

GRSG habitat is categorized as PHMA, GHMA, and Linkage Connectivity Habitat Management Areas (LCHMA), collectively considered All Designated Habitat (ADH). PHMA are areas identified by the BLM, in coordination with CPW, as possessing the highest conservation value in maintaining sustainable GRSG populations and include breeding, late brood-rearing, and winter concentration areas. GRSG habitat is evaluated at the population scale and at the management zone (MZ) scale. GRSG habitat is divided into MZs to manage disturbance caps and to identify geographically unique habitat areas.

The Proposed Action Alternative includes parcels in the Northwest Colorado (NWCO) population and the North Park population. The NWCO population is divided into ten unique MZs. The proposed parcels are in MZs 2, 3, 4, 5, 7, and 10. Each of these MZs include breeding, brood-rearing, and winter seasonal habitats, which are important to GRSG survival. The North Park population is represented entirely by MZ 11 and contains one parcel.

There are currently 172,593 acres of ADH leased for potential fluid mineral development in NWCO of which 125,206 acres of ADH are leased in MZs 2, 3, 4, 5, 7, and 10 (**Table 21**). There are 60,850 acres of ADH currently leased in North Park, MZ 11.

Table 21. Currently Authorized Fluid Mineral Acreage in PHMA and GHMA								
Analysis Area	Total Acres		Acres Closed to New Leasing		Acres Open to New Leasing		Percent Leased ¹	
	PHMA	GHMA	PHMA	GHMA	PHMA	GHMA	PHMA	GHMA
NWCO Population	1,162,912	1,314,839	262,584	102,178	900,328	1,212,661	9.1%	7.5%
NWCO- MZ 2	72,677	90,399	23,015	15,695	49,662	74,703	18.0%	10.6%
NWCO- MZ 3	137,407	375,819	22,431	43,903	114,976	331,916	15.6%	6.3%
NWCO- MZ 4	174,990	48,233	34,967	997	140,023	47,237	2.0%	2.1%
NWCO- MZ 5	232,863	23,280	45,310	812	187,553	22,468	9.5%	2.6%
NWCO- MZ 7	43,044	41,114	13,179	8,668	29,865	32,446	58.0%	25.1%
NWCO- MZ 10	87,139	184,840	19,479	6,033	67,660	178,807	3.3%	11.0%
North Park - MZ 11	257,672	95,642	52,521	12,323	205,151	83,319	23.6%	14.9%

¹ Percentage based on leasable acres within each habitat designation, not the total acres. Additionally, some valid existing leases occur on lands closed to new leasing.

Each population and MZ are limited to a 3 percent surface disturbance cap and a 1 facility per 640-acre density cap in PHMA. None of the NWCO or North Park MZs have exceeded the disturbance or density cap (Table 22).

Table 22. Current Disturbance and Density Cap Values			
Analysis Area	Anthropogenic Surface Disturbance (%)	Density of Facilities per 640 Acres	Primary Source(s) of Disturbance
NWCO Population	0.81%	0.23	Roads, oil & gas facilities, mining (coal and non-coal), pipelines
NWCO- MZ 2	0.77%	0.48	Roads, Hiawatha oil & gas field
NWCO- MZ 3	0.87%	0.59	Roads, Powder Wash oil & gas field
NWCO- MZ 4	0.66%	0.06	Roads
NWCO- MZ 5	1.08%	0.28	Roads, oil & gas facilities
NWCO- MZ 7	0.67%	0.37	Roads, some oil & gas facilities
NWCO- MZ 10	0.34%	0.07	Roads
North Park - MZ 11	0.94%	0.54	Roads, various oil & gas fields

Environmental Consequences

Proposed Action Alternative

The effects of oil and gas development and its related infrastructure on GRSG have been thoroughly analyzed in recent LUP amendments, which are therefore incorporated by reference here. These documents include the GRSG FEIS, 2015 (Volume 2: Chapter 4, pages 4-77 to 4-82 (Direct and Indirect Impacts on Greater Sage-grouse) and 4-89 to 4-97 (Impacts from Fluid Minerals Management on GRSG); Volume 3: Chapter 5, pages 5-29 to 5-36 (Energy Development and Mining), 5-42 to 5-46 (Infrastructure), and 5-54 to 5-56 (Spread of Weeds), as well as the EISs for the WRFO ROD/RMPA, 2015; LSFO ROD/RMP, 2011; KFO ROD/ARMPA, 2015; and GRSG ROD/ARMPA, 2015, (Chapter 3: 3-92 through 3-94).

Impacts from oil and gas development would increase as the number of pads or wells developed increases and would be most pronounced in nesting and brood-rearing habitat. Influences of oil and gas development on GRSG can include mortality from collision with infrastructure or vehicles, short-term

impacts associated with site-scale habitat loss and behavioral avoidance, and long-term impacts on grouse behavior and demographics. Oil and gas development can contribute to declines in lek persistence and male attendance, yearling and adult hen survival, and nest initiation rates miles from the source of disturbance. Oil and gas wells elicit strong avoidance response in yearling age classes, nesting/brooding hens, and wintering birds (GRSG FEIS 2015).

The Proposed Action would incrementally add to the overall leased acres in the NWCO and North Park populations. Reasonably Foreseeable Development Scenarios (RFDS) indicate that the proposed parcels would be developed (EISs for the WRFO ROD/RMPA, 2015; and LSFO ROD/RMP, 2011). Future development of one or more of these parcels would contribute to increased habitat fragmentation and disturbance to vegetative communities. The potential development and fragmentation, however, would be lessened within PHMA and parts of GHMA through application of NSO stipulations GRSG NSO-46e(1) and GRSG NSO-46e(2) and a LN that limits surface disturbance and density of infrastructure (LN-46e).

The 2015 GRSG ARMPA requires monitoring and management of habitat loss and fragmentation through the disturbance and density caps. The NWCO population has a current disturbance of 0.81% and a density of 0.23 facilities per 640 acres, not exceeding the disturbance or the density cap. The North Park population has a current disturbance of 0.94% and an average density of 0.54 facilities per 640 acres. Due to the small number of disturbed acres compared to the total acres of PHMA paired with the application of LN-46e, it is not likely that future development associated with the Proposed Action would result in either cap to be in exceedance across the Northwest Colorado or North Park populations. Similar conclusions can be made for MZs 2, 3, 4, 5, 7, and 10, which are all below both caps and are not likely to exceed either cap under RFDS (**Table 22**).

Prioritization of GRSG Parcels

The 2015 GRSG ARMPA states that, “Priority will be given to leasing and development of fluid mineral resources, including geothermal, outside PHMA and GHMA. When analyzing leasing and authorizing development of fluid mineral resources, including geothermal, in PHMA and GHMA, and subject to applicable stipulations for the conservation of GRSG, priority will be given to development in non-habitat areas first and then in the least suitable habitat for GRSG.” See, for example, Objective MR-1 of the 2015 Northwest Colorado Greater Sage-Grouse Approved Resource Management Plan Amendment (2015 GRSG ARMPA).

The BLM complies with Objective MR-1 by applying the seven management decisions and associated stipulations that pertain to unleased fluid minerals in GRSG management areas (MR 1 through MR 7 and Stipulations GRSG NSO-46e(1), NSO-46e(2), TL 46e, LN-46e, respectively). In addition to plan conformance and the analysis in this section of the document, the BLM analyzes and offers prioritized parcels as they relate to GRSG habitat and potential oil and gas leasing and development. BLM CO has identified 18 parcels (below) that may be more appropriate under a future leasing action. See **Appendix D** for a full description of the BLM’s prioritization process.

Parcels 152, 153, 154, 165, 167, 171, 172, 175, 185, 186, 187, 6175, 6176, 6177, and 6179 in MZ 3 of the NWCO population are primarily in PHMA. These parcels are near active leks with limited active oil and gas development in the area. Habitat quality in MZ 3 has decreased due to years of drought and over-utilization. The poor habitat conditions are reflected by continual decreases in GRSG populations. Because of the adaptive management trigger for NWCO and continued population declines in MZ 3, the BLM and its agency partners will begin an assessment of management in MZ 3 to see if more restrictive management is warranted or if habitat projects need to occur.

Parcels 237, 238, and 6197 are located entirely within PHMA in MZs 4 and 5 of the NWCO population. The GRSG NSO-46e(1) stipulation would apply to the entirety of each parcel. Each of these parcels have

at least four active leks within 4 miles. There are no adjacent leases to these parcels, which in turn complicates Federal fluid mineral extraction under current conditions. The proximity of active leks and locations in high quality, priority habitat paired with the difficult development scenario make these parcels low priority for leasing under the current sale.

Reasonably Foreseeable Environmental Trends

The NWCO population has the largest amount of PHMA and GHMA, and the most robust bird counts of the GRSG populations in Colorado. The North Park population is the second largest population in Colorado. Population numbers for GRSG are cyclical by nature but may be impacted further by development of authorized leases. The NWCO and North Park populations have trigger thresholds assigned under the 2015 GRSG ARMPA, Appendix H, Guidelines for Implementation and Adaptive Management, H.4. If the 3-year average high male count (HMC) falls below the 25th percentile of the long-term average, the BLM and other collaborating partners would determine the cause behind the decrease and seek more restrictive management action. Unpublished population count data from CPW show that the 3-year HMC for NWCO is currently 8 percent below the 25th percentile threshold. The NWCO population is currently 60 percent of the 10-year average, though the single-year counts show an upward trend. The population counts for MZs 2, 3, 4, and 7 have continually decreased while other MZs in the NWCO population have started to increase.

MZ 3 continues to show the greatest rate of decline with the single-year count at 32 percent of the 10-year average. CPW echoed these trends in the scoping letter submitted for the Proposed Action, stating, “Zone [3] experienced the largest lek count decline, compared to the previous year’s count, among all the northwest GrSG management zones.” Habitat quality in MZ 3 has decreased due primarily to ongoing drought and overutilization. MZ 3 contains the Sand Wash Horse Herd Management Area (HMA). Until September of 2021, the HMA was exceeding the high end of the Appropriate Management Limit (AML) range of 163 to 362 horses by approximately 534 horses. The BLM performed a gather to remove some of the wild horses from the range due to the number of excess horses, and poor forage and water resource conditions. The same conditions limit sagebrush, perennial grass, and forb growth, which are important habitat objectives for GRSG. The low precipitation regime for the area and ongoing drought will likely result in slow site recovery.

The population associated with MZ 7 has experienced less decline than some other MZs within the NWCO population, but lek counts have decreased below 100 males for the 3-year average HMC, a threshold CPW uses to determine if GRSG hunting will be allowed for the unit (Northwest Colorado Local Working Group Plan 2008). MZ 5 has an increasing trend for single-year population counts but the 3-year HMC remains at 46 percent of the 10-year average. MZ 10 has slowly increased since the most recent nadir in 2019, though the 3-year HMC for MZ 10 remains under 100 birds.

The North Park population has followed cyclical trends common to GRSG, but with less drastic declines than other populations in Colorado. The 3-year HMC has continued to stay at or above the long-term median of 790 birds (2020 Adaptive Management Report).

In a comprehensive range-wide report for GRSG recently released by the U.S. Geological Survey, GRSG lek counts have continually trended downward by 3 percent each year (Coates et al. 2021). Models from the report predict that up to 78 percent of leks have a 50 percent likelihood of extirpation over the next 56 years, starting from the time of 2019 projections. The researchers cite drought as a general pattern for range-wide population decreases, though other factors such as habitat loss from wildfire, development of energy infrastructure, and conversion of sagebrush to agriculture, impact biotic and abiotic components of GRSG habitat. Coates et al. (2021) specifically mention the correspondence of population decline and energy development in northwestern Colorado and northeastern Wyoming. The combination of range-

wide stochastic drought and landscape disturbances may reduce the ability for GRSG to recover in years with particularly low precipitation (Coates et al. 2021).

Planned Actions in the Area

It is reasonable to assume that development would occur in or near the MZs included in the Proposed Action. An APD for one well has recently been approved on an existing lease in MZ 7 within PHMA near proposed Parcels 244, 6198, and 6199 (DOI-BLM-CO-N050-2021-0002-EA). The location is approximately 2 miles northeast of Parcel 6199 and 3.5 miles east of Parcel 6198. This location has been approved by the BLM but not yet developed. The reasonably foreseeable development could create surface disturbances and new disruptive locations, contributing towards both the 3% disturbance cap and the 1 facility per 640-acre density cap. The recent development in the area has occurred on valid existing leases issued prior to the 2015 GRSG ARMPA, which do not include the NSO, TL, or LNs for surface occupancy in PHMA. However, new leases within PHMA would have TL-46e and LN-46e enforced as COAs during the development stage, consistent with management decisions MR-8 through MR-14 for leased fluid minerals (2015 GRSG ARMPA, Chapter 2, page 2-15). Any future development in PHMA or GHMA would have a thorough land use plan conformance review by the BLM sage-grouse natural resource specialist to ensure all applicable lease stipulations are being enforced, as well as adding any relevant COAs or mitigation requirements to the APD in accordance with the 2015 GRSG ARMPA and other Federal regulations.

Partial Leasing Alternative

Under the Partial Leasing Alternative, the parcels considered to be higher priority for leasing under the GRSG prioritization strategy would be offered in the lease sale (see **Table 4**). See **Appendix D** for a full description of the BLM's prioritization process. The prioritization strategy identifies parcels that have the greatest amount of PHMA, are closest to the greatest number of active leks, and have the most barriers to resource access.

Of the nine parcels, six parcels are partially or fully within GHMA. Leasing any or all of these parcels would not directly impact GRSG. If development of the leases were to occur, impacts to GRSG could include declines in lek persistence and male attendance, yearling and adult hen survival, and nest initiation rates miles from the source of disturbance. Oil and gas wells elicit strong avoidance response in yearling age classes, nesting/brooding hens, and wintering birds (GRSG FEIS 2015). However, these impacts are likely to be less severe because GHMA tends to be less optimal habitat or supports fewer seasonal habitat areas than PHMA. All stipulations applied to the parcels, which could include GRSG NSO-46e(2) and GRSG TL-46e, would be enforced during development. Any further impacts to seasonal grouse habitat would be addressed through COAs and other types of site-scale mitigation.

If development were to occur on the leases within GHMA, neither the disturbance nor the density cap would be impacted. The disturbance and density caps are calculated only for PHMA within a given MZ or population.

No Action Alternative

The No Action Alternative would not affect GRSG habitat. However, not leasing has the potential to cause oil and gas development to occur from alternate locations, such as private or State lands, and could result in less optimal mineral extraction or additional surface disturbance by not collocating disturbances. These shifts in the area of development may adversely affect GRSG populations and habitat by increasing fragmentation on non-Federal lands, which may also offer few to no development stipulations.

Mitigation Strategies

At the development stage, the field office will evaluate if development location stipulations are sufficient to protect GRSG habitat. Further environmental analysis at that time will assist BLM in determining whether, in addition to the stipulations, additional protective measures are necessary. Protective BMPs or Required Design Features (RDFs) may be incorporated to development designs. Mitigation may be necessary to ensure net conservation gain in conformance with the 2015 GRSG ARMPA (MD SSS-3). At the time of proposed development, the BLM may require additional conservation measures as COAs.

3.3.10 ISSUE 10: HOW WOULD LEASING POTENTIALLY AFFECT MIGRATORY BIRD NESTING AND HABITAT? (KFO, LSFO, RGFO, AND WRFO)

Affected Environment

In the RGFO, the dominant habitat in this physiographic area is shortgrass prairie. Shortgrass is dominated by two low-growing warm-season grasses: blue grama and buffalo grass. Western wheatgrass is also present, along with taller vegetation, including widespread prickly-pear cactus and yucca, and cholla in the south. Sandsage prairie is found where sandy soils occur and is dominated by sand sagebrush and the grasses sand bluestem and prairie sand-reed. Mixed grass (needle-and-thread; sideoats grama) and tallgrass (big bluestem; little bluestem; switchgrass) communities occur locally.

The parcels located in the NWD are located in sagebrush shrubland and shrubsteppe habitat, as well as coniferous forest types (often lodgepole pine) interspersed with dominant aspen at higher elevations and piñon-juniper woodlands on the lower plateaus.

Birds of Conservation Concern (BCC) are the migratory and non-migratory bird species (beyond those already designated as Federally threatened or endangered) that represent FWS’s highest conservation priorities (2021). The list is based on an assessment of several factors, including population abundance and trends, threats on breeding and nonbreeding grounds, and size of breeding and nonbreeding ranges. **Table 23** lists the 2021 FWS BCC for Bird Conservation Region (BCR) 10, Northern Rockies, BCR 16, Southern Rockies/Colorado Plateau, and BCR 18, Shortgrass Prairie, and may occur within the proposed lease areas.

Table 23. Birds of Conservation Concern by Bird Conservation Region			
Species	BCR 10	BCR 16	BCR 18
Western Grebe	X	X	
Clark's Grebe	X	X	X
Chimney Swift			X
Black Swift		X	
Calliope Hummingbird	X		
Rufous Hummingbird	X		
Broad-tailed Hummingbird	X	X	X
Yellow Rail	X		
Mountain Plover	X	X	X
Snowy Plover (Interior/Gulf Coast)		X	X
Whimbrel (Atlantic)			X
Long-billed Curlew			X
Hudsonian Godwit			X
Buff-breasted Sandpiper			X
Pectoral Sandpiper		X	X
Lesser Yellowlegs	X	X	X
Willet	X		

Species	BCR 10	BCR 16	BCR 18
Franklin's Gull	X		
California Gull	X	X	
Black Tern	X		
Flammulated Owl	X	X	
Northern Harrier			X
Ferruginous Hawk			X
Long-eared Owl		X	X
Short-eared Owl		X	X
Lewis's Woodpecker	X	X	X
Williamson's Sapsucker (Rocky Mountain)	X		
Red-headed Woodpecker			X
Olive-sided Flycatcher	X	X	
Pinyon Jay	X	X	X
Clark's Nutcracker		X	
Bendire's Thrasher		X	
Evening Grosbeak	X	X	
Black Rosy-Finch	X	X	
Brown-capped Rosy-Finch		X	
Cassin's Finch	X	X	
Sprague's Pipit			X
Chestnut-collared Longspur			X
Thick-billed Longspur	X		X
Grasshopper Sparrow (Northern)			X
Pyrrhuloxia			X
Black-chinned Sparrow		X	
Yellow-headed Blackbird		X	
Virginia's Warbler		X	
Grace's Warbler		X	
Bobolink	X		
Source: FWS 2021			

These species have been identified as birds that may be found in the project area, have declining populations, and should be protected from habitat alterations.

Environmental Consequences

Proposed Action Alternative

Leasing would have no impact on individual migratory birds, populations, or habitat. If leases were developed, surface-disturbing activities, such as road building or pad and pipeline construction, would destroy existing habitat. If surface-disturbing activities occur during the nesting season, destruction of nests may occur. Noise and human activity generated during construction, drilling, and production phases would likely result in a larger impact footprint than the disturbance footprint alone.

Migratory birds may be burned, entrapped, and/or killed by exhaust vents, heater-treaters, flare stacks, and open pipes, etc., because of development-related infrastructure. An increase in activity (i.e., road traffic) would likely result in an increase in vehicular collisions with migratory birds. Disturbance to migratory birds that result from close encounters with humans and cause a flight reaction may cause nest

abandonment, decline in parental care, increased stress, shortened feeding times, and potentially lower reproductive success (Larson et al. 2019).

Habitat fragmentation is defined as both the loss of habitat and the breaking apart of habitat into smaller units (Fahrig 2003). In theory, large pieces of habitat support a higher number of species when compared to smaller pieces (Higgs 1981; Fahrig 2003). In a large meta-analysis of the effects of habitat fragmentation on birds, Bregman et al. (2014) found that seed-dispersing and insectivorous birds were most negatively affected by habitat fragmentation.

Appropriate lease stipulations to protect some migratory birds and their habitats apply to parcels and are described in **Appendices A and B**. Furthermore, at the field development and APD stage, it is standard procedure to include a COA on all APDs to mitigate impacts to migratory birds. The COA would ensure that operators take measures to prevent destruction of nests and effectively preclude migratory bird access to, or contact with, reserve pit contents that possess toxic properties (i.e., through ingestion or exposure) or have the potential to compromise the water-repellent properties of birds' plumage, or other harmful conditions associated with development.

Reasonably Foreseeable Trends and Planned Actions

Throughout the lease area, many activities may be currently occurring, along with historic impacts, that affect migratory bird species. These activities could include, but are not limited to, oil and gas development, residential development, grazing, agriculture, mining, and recreation. In areas where human development previously modified the natural environment (e.g., via agriculture; settlement; past oil and gas development), the richness and diversity are likely compromised. New oil and gas development would likely cause an additive negative impact on most species of migratory birds currently present. While the leasing of parcels would not compound these impacts, future oil and gas development may impose deleterious effects. Every parcel is unique, and site-specific impacts would be considered in the context of the affected environment in the effects analysis at the development stage.

Partial Leasing Alternative

Like the Proposed Action Alternative, the act of leasing the parcels for oil and gas development would have no direct impact on migratory bird resources; however, activities at the development stage could have impacts on migratory birds, including their habitat. The magnitude and location of direct and indirect effects cannot be predicted until the site-specific development stage; therefore, specific impacts to migratory birds caused by potential future development cannot be analyzed with accuracy prior to leasing.

If developed, the parcels proposed in this alternative would result in impacts similarly described in the Proposed Action Alternative.

No Action Alternative

The No Action Alternative would not directly or indirectly affect migratory birds. However, migratory bird resources would be affected by the continuation of current land and resource uses on or near the parcels. The No Action Alternative may reduce or delay Federal impacts to migratory birds from potential oil and gas development associated with the lease parcels. However, oil and gas development may occur at a later time or another location, which may affect migratory birds.

Mitigation Strategies

Pursuant to BLM Instruction Memorandum 2008-050, to reduce impacts to BCCn, no habitat disturbance (removal of vegetation such as timber, brush, or grass) may be authorized May 15 to July 15, the breeding and brood-rearing season for most Colorado migratory birds, unless nesting surveys confirm no nesting

close to the site just prior to disturbance. The restriction does not apply to completion activities in disturbed areas that were initiated prior to May 15 and continue into the 60-day period.

The BLM also would require any secondary containment system to be covered in a manner to prevent access by migratory birds. The operator would be required to construct, modify, equip, and maintain all open-vent exhaust stacks or pipes on production equipment to prevent birds and bats from entering and to discourage perching, roosting, and nesting. Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, and in-line units.

Additionally, standard lease terms and conditions, which allow the BLM to move an operation up to 200 meters and delay operations for up to 60 days, may be implemented to protect valuable wildlife resources. The BLM may further limit the timing of operations or relocate them to a greater degree if supported by appropriate analysis.

3.3.11 ISSUE 11: HOW WOULD LEASING POTENTIALLY AFFECT RAPTOR NESTING? (RGFO)

Affected Environment

In the NWD, stipulations that protect raptor nesting would be applied in conformance with the associated RMPs, as described in **Appendices A and B**; therefore, raptor nesting is not analyzed in detail for the NWD as noted in **Table 3**.

Colorado provides a variety of nesting habitat and foraging habitats in pinyon juniper, spruce fir, and aspen woodlands, as well as riparian and cliff habitats. Few raptor nest locations are known within the proposed leases on split estate parcels because the BLM generally does not have information about wildlife resources on privately owned surface. Active nests of all species of raptors are protected under the Migratory Bird Treaty Act, and bald and golden eagles are protected under the Bald and Golden Eagle Protection Act.

Environmental Consequences

Proposed Action Alternative

Lease stipulations applied to each parcel would necessitate raptor nest surveys to locate and maintain site characteristics of existing nests. Additionally, TLs would reduce disruption of adult attendance at each known occupied nest location. Raptors also are protected by a combination of NSO and TL stipulations applied to leases to reduce adverse effects of potential oil and gas development. Lease parcels in this proposal are subject to BLM Stipulations CO-03 and CO-18 to protect raptor nest sites and raptor nesting and fledgling habitat. This control method allows the protection of known active nest sites during development activities. While the footprint of individual wells may be minimal, the functional habitat lost due to the network of wells and connecting roads may be considerable. The potential for oil and gas-related disturbances of nesting, foraging, and roosting raptors arises from new well installation activities, including road and pad construction, drilling, and equipment installation over the course of several weeks to months. In addition, continual servicing and maintenance of wells over their productive lifetime may cause a habitat avoidance response over the long-term.

Reasonably Foreseeable Trends and Planned Actions

Throughout the proposed leasing area, many activities are occurring, along with historic impacts, which affect wildlife resources. These activities include oil and gas development, residential development, grazing, agriculture, mining, and recreation. While the leasing of parcels would not compound these impacts, future oil and gas development may impose deleterious effects. Every parcel is unique, and site-

specific impacts would be considered in the context of the affected environment in the effects analysis at the development stage.

Partial Leasing Alternative

Like the Proposed Action Alternative, the act of leasing the parcels for oil and gas development would have no direct impact on raptor resources; however, activities at the development stage could have impacts on raptors, including their habitat. The magnitude and location of direct and indirect effects cannot be predicted until the site-specific development stage; therefore, specific impacts to raptors caused by potential future development cannot be analyzed with accuracy prior to leasing.

If developed, the parcels proposed in this alternative would result in impacts similarly described in the Proposed Action Alternative.

No Action Alternative

The No Action Alternative would not directly or indirectly affect raptors. However, raptors would be affected by the continuation of current land and resource uses on or near the parcels. The No Action Alternative may reduce or delay Federal impacts to raptor from potential oil and gas development associated with the lease parcels. However, oil and gas development may occur at a later time or another location, which may affect raptors.

Mitigation Strategies

Because of the lack of raptor nesting information on split estate lands, a standard COA would require a raptor nest survey where habitat existed. If a nest were found, the stipulations would protect the integrity of site characteristics for existing nests and reduce disruption of adult attendance at each known occupied nest location.

Additionally, a biological inventory may be required to gather baseline information; and the BLM may require an operator to move an operation and/or delay development activity to protect valuable wildlife resources if supported by inventories and site-specific NEPA analysis for the development activity.

3.3.12 ISSUE 12: HOW WOULD LEASING POTENTIALLY AFFECT SPECIAL STATUS SPECIES AND THEIR HABITAT? (RGFO)

Affected Environment

Parcels in the NWD that contain special status species have NSO and TL stipulations applied in conformance with their associated RMPs, as described in **Appendices A and B**, and are not analyzed in detail as noted in **Table 3**.

Lands considered in the RGFO may be defined as shortgrass prairie ecosystems. Shortgrass ecosystems are dominated by two low-growing warm-season grasses: blue grama and buffalo grass. Western wheatgrass is also present, along with taller vegetation, including widespread prickly-pear cactus and yucca, and cholla in the south. Sandsage prairie is found where sandy soils occur and is dominated by sand sagebrush and the grasses sand bluestem and prairie sand-reed. Mixed grass (needle-and-thread, sideoats grama) and tallgrass (big bluestem, little bluestem, switchgrass) communities occur locally. Studies suggest that the shortgrass prairie ecosystem has declined to around 52 percent of its historic range (Samson et al. 2004).

Many sensitive species (black-tailed prairie dog, swift fox, Townsend's big eared bat, common kingsnake, milk snake, desert massasauga rattlesnake, Preble's meadow jumping mouse, long billed

curlew, mountain plover, interior least tern, Brewer's sparrow, burrowing owl, ferruginous hawk, bald eagle, golden eagle, and American white pelican) have potential to occur in shortgrass prairie ecosystems and therefore on parcels available for leasing.

All proposed lease parcels are subject to BLM stipulation CO-34 to alert lessees of measures that the BLM may use to protect potential habitat for a threatened, endangered, candidate, or other special status plant or animal species. Protective measures for these species would be applied, if necessary, at the APD stage and may include the need to move development pads, enforce TLs, and enforce NSO restrictions. Additional NEPA analysis would be completed at the APD stage. Site-specific field visits would be conducted as deemed necessary for those parcels that contain Federally listed and sensitive species habitat. The BLM would consult with the FWS, as needed, in accordance with Section 7 of the Endangered Species Act (ESA).

CPW designates certain wetland areas as aquatic habitat recovery and conservation waters. These designations are defined as reaches containing species under management for population conservation and recovery. These species may include fishes, such as the Arkansas darter, brassy minnow, common shiner, flathead chub, plains minnow, northern and southern redbelly dace, Iowa darter, plains orange throat darter, suckermouth minnow, and plains topminnow, as well as amphibian species, such as the northern leopard frog and plains leopard frog. All of these are designated by CPW as species of conservation concern or having special status.

Several special status species may occur within the proposed leasing area. Black-tailed prairie dogs are small burrowing rodents that primarily occur in scattered colonies throughout the Eastern Plains of Colorado. Recent survey results suggest that statewide, approximately 631,000 acres of black-tailed prairie dog habitat are occupied compared to an estimated 100 to 200 million acres historically (FWS 2000). Black-tailed prairie dogs are known to substantially alter the landscape through burrowing activity, and in some cases, they are responsible for creating habitat for mutualistic species such as the burrowing owl and mountain plover (George 2003). Kotliar et al. (1999) suggest that black-tailed prairie dog colonies are associated with many other species, including the ferruginous hawk, golden eagle, and swift fox, which are listed as being sensitive or having populations of concern.

Swift foxes primarily occur within the shortgrass and mixed grass prairie on the Eastern Plains of Colorado and are listed as a state species of special concern by CPW. It is believed that Colorado may hold the largest remaining population of swift foxes of any State due to the State's abundance of shortgrass prairie ecosystems (Finley et al. 2005). Swift foxes are a denning species, and dens often occur in ridges, slopes, hill tops, pastures, roadside ditches, fence rows, and cultivated fields adjacent to food sources, such as black-tailed prairie dog colonies. The distribution of the swift fox is estimated at about 40 percent of its historic range (Kahn et al. 1997).

The Townsend's big-eared bat occurs in Colorado and throughout the west. Habitat associations include coniferous forests, deserts, native prairies, riparian communities, and agricultural areas. Distribution is strongly correlated with the availability of caves and cave-like roosting habitat, with population centers occurring in areas dominated by exposed, cavity-forming rock and/or historic mining districts (Fellers and Pierson 2002). Townsend's bats feed on a variety of flying arthropods, such as moths, beetles, flies, and wasps, usually hunting along the edges of vegetation lines and habitat transitions (Fellers and Pierson 2002). Many bat species, especially cave-roosting or colony-forming bats like the Townsend's bat, are at risk of extreme population decline or local extinction due to white nose syndrome (Blehert et al. 2009).

The common kingsnake has been found near irrigated fields on the floodplain of the Arkansas River, in rural residential areas in plains grassland, near stream courses, and in other areas dominated by shortgrass prairie. Periods of inactivity are spent in burrows and logs, in or under old buildings, in other

underground spaces, or beneath various types of cover. Known from a few locations in southeastern Colorado (north to the vicinity of the Arkansas River) and a few sites in extreme southwestern Colorado (western Montezuma County), at elevations below 5,200 feet, the species is generally difficult to find but may be common locally due to its restricted range in Colorado. Population declines in recent years have been attributed to habitat loss (Winne et al. 2007).

The milk snake occupies a wide variety of habitats in Colorado, including shortgrass prairie, sandhills, shrubby hillsides, canyons, and open stands of ponderosa pine with Gambel oak in the foothills, pinyon-juniper woodlands, arid river valleys, and abandoned mines. Generally feeding on small mammals and reptiles (Hamilton et al. 2012), milk snakes are active at night and may be found under cover, such as discarded railroad ties in sandhill regions during the day. Hibernation sites include rock crevices that may be shared with other snake species. The species occurs throughout most of Colorado at elevations below 8,000 feet and is generally scarce.

Desert massasauga rattlesnake habitat in Colorado consists of dry plains grassland and sandhill areas common to the shortgrass prairie ecotype. In southeastern Colorado, this species occurs at elevations below 5,500 feet. Desert massasauga rattlesnakes appear to be highly dependent on specific habitat types, during different times of the year. This snake species has been shown to migrate a mean distance of 1.89 kilometers from winter hibernacula to summer foraging grounds (Wastell and Mackessy 2011), making it particularly susceptible to death from anthropogenic factors such as road construction. Populations have declined across North America due to habitat loss. The desert massasauga rattlesnake is known to occur in portions of Baca and Lincoln Counties but may occur elsewhere (Mackessy 2007). The species is currently under review for listing by FWS under the ESA.

Preble's meadow jumping mouse is a Federally threatened species generally found within the North Platte, South Platte, and Arkansas River drainages of Colorado and Wyoming (FWS 2008). This species inhabits heavily vegetated, shrub-dominated riparian habitats and immediately adjacent undisturbed grassland communities up to 100 meters beyond the 100-year floodplain. Critical habitat has been designated, although these areas are generally along the foothills of the Colorado Front Range (FWS 2013). The proposed leasing area is within the mapped overall range for Preble's meadow jumping mouse as mapped by CPW.

Long-billed curlew is the largest North American shorebird. Although rarely observed far from water, these birds are considered a grassland species, as they forage in open prairies or agricultural fields that are often adjacent to water in areas that contain wet soils (Fellows and Jones 2009). In Colorado, they are usually associated with ponds, reservoirs, playas, and wet meadows but do not typically nest in agricultural fields.

Mountain plovers are found throughout the RGFO in suitable habitats and are listed as a State species of special concern by CPW. While the species is relatively rare, they can generally be found in open, flat tablelands that display some function of disturbance such as agricultural production, drought, grazing, fire, or near prairie dog colonies (Knopf and Miller 1994; Kotliar et al. 1999). Mountain plover nesting occurs at or near ground level, and young plovers often forage along habitat edges, such as boundaries or roads.

The Brewer's sparrow breeds primarily in sagebrush shrublands but will also nest in other shrublands, such as mountain mahogany or rabbitbrush. While migrating, the species will occupy wooded, brushy, and weedy riparian, agricultural, and urban areas. They are locally uncommon to common on the Eastern Plains and lower foothills of Colorado.

The burrowing owl is closely associated with active prairie dog colonies throughout its range (Kotliar et al. 1999) and is more likely to inhabit active colonies than inactive ones (Desmond et al. 2000).

Burrowing owls require a mammal burrow or natural cavity surrounded by sparse vegetation for nesting. Burrow availability is often limiting in areas lacking colonial burrowing rodents. Burrowing owls frequently use burrows of black-tailed prairie dogs; however, they will nest less commonly in the burrows of Gunnison's prairie dogs, skunks, foxes, and coyotes.

The ferruginous hawk inhabits open grasslands and shrub steppe communities (Dechant et al. 2002) and is rare in pinyon-juniper woodlands. Ferruginous hawks are typically winter residents on the Eastern Plains but may nest in this area on occasion, generally on the ground or on small outcroppings within 8 kilometers of prairie dog towns (Roth and Marzluff 1989). Winter residents are known to concentrate around prairie dog towns, and winter numbers and distribution fluctuate greatly according to the availability of prairie dogs. Migrants and winter residents may also occur in shrublands and agricultural areas but have been shown to prefer native grasslands (Dechant et al. 2002).

Bald eagles in Colorado typically nest in large cottonwood trees along rivers and reservoirs. Eagle densities reach their peak during the winter months when migrants arrive from the north (Harmata 2002). The bald eagle is a common winter (December through March) visitor to the RFGO. Bald eagle usage (winter roosting, nesting, etc.) occurs near several major riparian areas and reservoirs on the Eastern Plains, and occupancy is highly correlated with the presence of water.

Golden eagle populations in Colorado occupy a variety of habitats ranging from grasslands and shrublands to forested woodlands. Nesting occurs on cliffs or in trees, but birds will range widely over surrounding habitats. The golden eagle's tendencies to travel great distances are thought to be driven by foraging opportunities, and pre-breeding-age eagles are known to disperse across large distances and use a variety of habitat types (Collopy et al. 2017).

Several parcels are located within CNHP PCAs. A PCA may include a single occurrence of a rare element or a suite of rare elements or significant features. The purpose of a PCA is to identify a land area that can provide the habitat and ecological processes upon which a particular element or suite of elements depends for their continued existence. The best available knowledge of each species' life history is used in identifying PCAs in conjunction with information about topographic, geomorphic, and hydrologic features, vegetative cover, as well as current and potential land uses.

Environmental Consequences

Proposed Action Alternative

The act of leasing parcels for oil and gas development would have no direct impact on wildlife resources. However, the authorization to lease parcels for oil and gas development would likely result in future development at some locations. The magnitude and location of potential development, and in turn, its potential to affect listed species or their critical habitat, cannot be determined until the site-specific APD stage. Currently, the BLM does not have specific details about future development; therefore, specific impacts to special status species from development remain unknown. However, pursuant to lease BLM Stipulation CO-34, all proposed lease parcels are subject to measures the BLM may take to protect potential habitat for a threatened, endangered, candidate, or other special status plant or animal species. Some generalized potential effects of lease development are described below.

Black-tailed prairie dog: Many areas within the range of black-tailed prairie dogs have been classified as valuable for oil and gas development. Possible direct negative impacts associated with oil and gas development include the local degradation of prairie dog habitat by clearing and crushing of vegetation, reduction in available habitat due to pad construction, road development and well operation, displacement and killing of animals, alteration of surface water drainage, and increased compaction of soils. Indirect

effects include increased access into remote areas by shooters and OHV users. Gordon et al. (2003) found that shooting pressure was greatest at colonies with easy road access compared to more remote colonies.

Swift fox and swift fox potential denning habitat: Oil and natural gas exploration fragments existing grassland habitat and increases road traffic and access by humans. Impacts of this type of disturbance on swift foxes are unknown, but both positive and negative effects may be expected. Increased road density may offer more foraging opportunities for swift foxes. However, loss and fragmentation of local habitat, increased mortality due to vehicle collisions, trapping, and accidental shooting may also result (Carbyn et al. 1994). Habitat fragmentation is generally regarded as being detrimental to species and their ecological interactions (Fahrig 2003). While current denning sites are unknown, mapped potential denning habitat occurs within some proposed lease parcels and is designated as the priority habitat for the species by CPW. Disruption of den sites due to development activity at the APD stage is possible, which would likely result in the abandonment of den sites. Therefore, mitigation measures (surveys to locate active den sites, timing limitations, and human encroachment limitations) will be performed at the APD stage.

Townsend's big eared bat: It is unlikely that the proposed lease parcels offer habitat suitable for hibernation or rearing of young Townsend's big-eared bats. Roosting bats may be subject to localized disturbance from development activity and long-term impacts from reductions in the extent of mature woodland stands as sources of roost substrate. Construction of roads and drill pads have the potential to negatively impact bat activity. This species is very sensitive to disturbance events and has been documented to abandon roost sites after human visitation. If hibernating bats are disturbed or awoken during hibernation, they may suffer mortality due to the premature depletion of energy stores (Thomas 1995; Boyles 2017). Studies have shown that motorized vehicles can disturb bat species up to 5 kilometers (~3.11 miles) away from the source of the noise, with major negative effects on bats occurring within 1 kilometer (0.62 mile) of the source (Claireau et al. 2019). In addition, Berthinussen and Altringham (2012) found that bat activity was 3.5 times higher 1,600 meters (1 mile) away from a road compared to near the road. Additionally, a trophic cascade may result from the loss of vegetation due to drill pad and road construction resulting in lowered arthropod prey densities, and therefore less food for foraging Townsend's bats.

Reptile species (common kingsnake, milksnake, and desert massasauga rattlesnake): Direct effects to the BLM sensitive reptile species could include injury or mortality as a result of construction, production, and maintenance activities. These effects would most likely occur during the active season for these species, which is generally April to October. Particularly, migrating desert massasauga rattlesnakes may be at risk as they travel from their winter hibernacula to their summer foraging grounds (Wastell and Mackessy 2011). Indirect effects of lease development on these reptile species could include a greater susceptibility to predation if roads or pads are used to aid in temperature regulation.

Preble's meadow jumping mouse: Effects of energy development on the Preble's meadow jumping mouse may include direct mortality from heavy equipment and increased mortality from vehicles due to the construction of roadways in conjunction with the project, and indirect negative effects due to habitat loss and increased exposure may also occur. Since FWS (2008) suggests that the mouse primarily uses riparian habitat, areas near streams and drainages should be avoided by developers when considering drill pad and road locations to minimize impacts. At this stage of the project, it is not possible to determine the exact effects of project development on the Preble's meadow jumping mouse. Site-specific field visits would be conducted as deemed necessary for those parcels that contain mapped Preble's mouse habitat; and the BLM would consult with the FWS, as needed, in accordance with Section 7 of the ESA, at that time.

Mountain plover and mountain plover potential nesting sites: Mountain plovers nest on nearly level ground (often near roads). Adults and chicks often feed on or near roads, and roads may be used as travel

corridors by mountain plovers. These factors make plovers susceptible to being killed by vehicles. Therefore, as oil and gas infrastructure are developed and used, the probability of plover mortality or nest destruction will likely increase locally. While nesting locations are currently unknown, mapped potential nesting habitat occurs within some proposed parcels and is the priority habitat for the species as designated by CPW. Mitigation (plover nesting survey, TLs, etc.) to prevent mortality would be identified at the APD planning stage.

Migratory birds, including Brewer's sparrow and long-billed curlew, may be burned or killed by exhaust vents, heater-treaters, flare stacks, etc., if perched at the opening while in operation. An increase in site activity (i.e., road traffic) would likely result in an increase in vehicular collisions with migratory birds. If leases are developed, surface-disturbing activities such as road building or pad and pipeline construction would destroy existing habitat. If surface-disturbing activities occur during the nesting season, destruction of nests may occur. Noise and human activity generated during construction, drilling, and production phases would likely result in a larger impact footprint than the disturbance footprint alone. However, mitigation proposed in the migratory bird section (**Section 3.3.10**) would be adequate to protect the Brewer's sparrow and long-billed curlew.

Burrowing owl: Since burrowing owls are highly dependent on prairie dog colonies (Kotliar et al. 1999), the primary impact to owls from developing leases would be from the potential loss of habitat or the disruption of a nest site if development were to occur within an active prairie dog colony. In addition, raptors are protected by a suite of stipulations (CO-03, CO-18, and CO-19) that require NSO within one-eighth mile of nests and a TL to protect raptor nesting and fledgling habitat.

Ferruginous hawk: Ferruginous hawks may construct nests upon oil and gas-related structures. However, these nests are less successful than nests built upon natural structures due to repeated human visitation. While the footprint of individual oil and gas wells is minimal relative to other energy developments, the total habitat lost to the network of wells and connecting roads can be considerable in areas undergoing full-field development. The potential for oil and gas-related disturbance of nesting, foraging, or roosting raptors arises not only from new well installation activities, including road and pad construction, drilling, and equipment installation over the course of several weeks to months, but also from continual servicing and maintenance of wells over their production lifetime. Raptors are protected by a suite of stipulations (CO-03, CO-18, and CO-19) that require NSO within one-eighth mile of nests and a TL to protect raptor nesting and fledgling habitat.

Bald eagle: Bald eagle foraging and nesting is dispersed and opportunistic across the entire RGFO area, with most activity centered near major riparian and reservoir areas. Surface-disturbing activities that have potential to disrupt important bald eagle seasonal use activities are subject to NSO and TL provisions (CO-03 and CO-18) to protect raptor nesting and fledgling habitat.

Golden eagle: Golden eagles are a wide-ranging species that is dispersed across the entire RGFO area. Surface-disturbing activities that have potential to disrupt golden eagle nesting activity are subject to NSO and TL provisions (CO-03 and CO-18) established in the applicable RMPs to protect raptor nesting and fledgling habitat. These stipulations have been successful in protecting ongoing nest efforts and maintaining the long-term utility of nest sites in the resource area.

Several lease parcels are located within PCAs. The Northeast and Royal Gorge RMPs contain a suite of stipulations that would protect many of the elements outlined in each PCA if leased parcels were eventually developed. Site-specific issues may be addressed as COAs at the APD stage.

Reasonably Foreseeable Trends and Planned Actions

Throughout the lease area, many ongoing activities, along with historic impacts, affect wildlife resources. These activities include oil and gas development, residential development, grazing, agriculture, mining, and recreation. While the leasing of parcels will not compound these impacts, future oil and gas development may impose deleterious effects. Every parcel is unique, and site-specific impacts would be considered in the context of the affected environment in the effects analysis at the development stage.

Partial Leasing Alternative

Like the Proposed Action Alternative, the act of leasing the parcels for oil and gas development would have no direct impact on wildlife resources; however, activities at the development stage could have impacts on wildlife, including special status species habitat. The magnitude and location of direct and indirect effects cannot be predicted until the site-specific development stage; therefore, specific impacts to wildlife caused by potential future development cannot be analyzed with accuracy prior to leasing.

If developed, the parcels proposed in this alternative that overlap special status species habitat would result in impacts similarly described in the Proposed Action Alternative.

No Action Alternative

The No Action Alternative would not directly or indirectly affect special status species and their resources. However, special status species would be affected by the continuation of current land and resource uses on or near the parcels. The No Action Alternative may reduce or delay Federal impacts to special status species from potential oil and gas development associated with the lease parcels. However, oil and gas development may occur at a later time or another location, which may affect special status species.

Mitigation Strategies

A COA that may be applied at the development phase would require operators to conduct a survey for Federally listed and BLM sensitive species where potential habitat exists prior to development. If these species or key habitat features are located, the BLM may implement TLs and/or spatial buffers to mitigate conflicts consistent with the Royal Gorge RMP, Northeast RMP, and 43 CFR § 3101.1-2.

If proposed development sites were in or near riparian and wetland communities that are designated as aquatic habitat recovery and conservation waters, a COA for a no surface disturbance buffer of 300 feet extending from the outermost limit of the riparian or wetland zone would be recommended.

If development were to occur from April 1 through August 15, a COA would require a survey for nesting mountain plover where habitat exists. A no surface disturbance buffer of 300 feet would be placed around identified active nest sites.

If development were to occur from April 1 through July 31, a COA would require a survey for nesting interior least tern where habitat exists. A no surface disturbance buffer of 300 feet would be placed around identified active nest sites.

If development were to occur from March 15 through June 15 in high-quality swift fox habitat, a COA would require a survey for active swift fox den sites. If active den sites were identified, a 0.25-mile no surface disturbance, human encroachment, or construction activity buffer would be placed around dens.

The BLM manages habitat for migratory birds and raptors, including golden eagles, ferruginous hawks, and burrowing owls. Therefore, raptor nest surveys would be conducted within a 0.5-mile radius (CPW-

recommended golden eagle buffer) of future project sites. Raptor nests located by survey efforts would be protected by species-appropriate, no surface disturbance buffers, in addition to the TL stipulations consistent with the RMPs. As a COA, the BLM may require that if a ferruginous hawk constructs a nest upon any oil and gas-related platforms (e.g., tanks), the BLM would be notified, an alternative nesting structure would be constructed, and the nest would be moved to the alternate structure at the expense of the lessee. However, the BLM has the flexibility to move development up to 200 meters to mitigate direct impacts, or farther based on site-specific analysis.

In general, the BLM may require an operator to move an operation and delay activities to protect valuable wildlife resources, if supported by the site-specific NEPA analysis for the proposed development activity.

In addition, the BLM may require relocation of proposed surface-disturbing activity up to 200 meters, or more if supported by analysis, to protect BLM sensitive plant species.

4. COORDINATION AND CONSULTATION

4.1 AGENCIES AND PERSONS CONSULTED

Courtesy letters were mailed to private surface owners of lands associated with a portion of the proposed lease parcels. In the two previously planned 2021 lease sales and for the upcoming 2022 lease sale, notification letters were also sent to the Federal, State, and local agencies, organizations, and representatives noted in **Table 24**.

Agencies and Persons Consulted	Q1 2021		Q2 2021	2022
	NWD	RGFO	Statewide	Statewide
Air Pollution Control Division of CDPHE				X
Arapaho National Wildlife Refuge	X			X
Bureau of Reclamation	X		X	X
Colorado Department of Agriculture	X			
Colorado Department of Natural Resources	X		X	X
CDPHE			X	X
Colorado Department of Transportation	X		X	X
COGCC	X			
CPW	X	X	X	X
Colorado State Forest Service	X		X	X
Colorado State Land Board	X		X	X
Colorado State Parks	X			
Colowyo Mine	X		X	X
Dinosaur National Monument	X		X	X
Garfield County Board of Commissioners	X			
US Senator Cory Gardner	X			
US Senator Michael Bennet	X			
Jackson County Board of County Commissioners	X		X	X
Las Animas County		X		
Las Animas County Board of County Commissioners			X	
Mesa County, Administrators Office and Planning Division	X			
Moffat County Board of County Commissioners	X		X	X
Former U.S. Representative Scott Tipton	X			
Rio Blanco County Board of Commissioners	X		X	X
Rocky Mountain National Park	X		X	X
Routt County Commissioners	X		X	X

Table 24. Notified Agencies, Organizations, and Representatives				
Agencies and Persons Consulted	Q1 2021		Q2 2021	2022
	NWD	RGFO	Statewide	Statewide
State Forest State Park	X			X
Town of Collbran	X			
Town of DeBeque	X			
Trapper Mining, Inc.	X			
US EPA, Denver	X			
USFS, Arapaho and Roosevelt National Forests	X		X	X
USFS, Medicine Bow-Routt National Forests	X		X	X
USFS, Lakewood	X		X	X
US FWS, Lakewood	X		X	X
US National Park Service	X	X	X	X
Weld County		X		
Yampa Valley Land Trust	X			X

4.2 NATIVE AMERICAN TRIBES CONSULTED

Consultation with potentially interested Native American Tribes is ongoing. Many Tribal offices are closed or operating at limited capacity due to restrictions imposed by the ongoing COVID-19 pandemic. This has caused delays in consultation responses. The BLM will continue efforts to consult with Tribes and understand potential concerns prior to issuing leases.

Consultation with the following Native American Tribes is not yet complete: Apache Tribe of Oklahoma, Cheyenne and Arapaho Tribes of Oklahoma, Cheyenne River Lakota Tribe, Comanche Tribe of Oklahoma, Crow Creek Sioux, Eastern Shoshone Tribe, Kiowa Tribe of Oklahoma, Northern Arapaho Tribe, Northern Cheyenne Tribe, Ute Indian Tribe of the Uintah & Ouray Reservation, Oglala Lakota Tribe, Pawnee Tribe, Rosebud Sioux Tribe, Southern Ute Indian Tribe, Standing Rock Sioux Tribe, and the Ute Mountain Ute Tribe.

4.3 COOPERATING AGENCY

The USFS is a cooperating agency.

4.4 LIST OF PREPARERS

Table 25. Interdisciplinary Review		
Name	Title	Resource(s) and/or Resource Use(s)
Desa Ausmus	BLM LSFO Wildlife Biologist	Migratory Birds, Riparian Zones & Wetlands, Special Status Animal Species, Wildlife (Aquatic & Terrestrial)
Paula Belcher	BLM KFO Hydrologist	Riparian Zones & Wetlands, Soils, Water Resources
Stacey Burke	BLM WRFO Realty Specialist	Lands & Realty
Malia Burton	BLM COSO Litigation Coordinator	BLM COSO NEPA Compliance
Forrest Cook	BLM COSO Air Resource Specialist	Air Resources
Bill Falvey	BLM KFO GIS Specialist	GIS
Jennifer Maiolo	BLM LSFO Mining Engineer	Geology/Minerals, Paleontological Resources
Diane Mastin Dixon	BLM COSO Natural Resource Specialist, Sage Grouse	Greater Sage-Grouse

Table 25. Interdisciplinary Review		
Name	Title	Resource(s) and/or Resource Use(s)
Aimee Huff	BLM LSFO Ecologist	Special Status Plant Species
Vernon Koehler	USFS PNG Minerals & Lands Staff Officer	Cooperating Agency Support and Review
Pamela Levitt	BLM LSFO GIS Specialist	GIS
John Monkouski	BLM KFO Outdoor Recreation Planner	Lands with Wilderness Characteristics, Recreation, Visual Resources
Whitney Patterson	BLM LSFO Outdoor Recreation Planner	Lands with Wilderness Characteristics, Recreation
Daniel Pike	BLM RGFO Geologist/Natural Resource Specialist	Geology/Minerals, Water Resources
San Delana Riebold	BLM WRFO Outdoor Recreation Planner	Recreation
Aaron Richter	BLM RGFO Fisheries Biologist	Aquatic Wildlife, Invasive/Non-native Species, Riparian Zones & Wetlands, Vegetation
James Roberts	BLM WRFO Supervisory Natural Resource Specialist	ACECs, Fire & Fuels, Human Health & Safety, Lands with Wilderness Characteristics, Visual Resources, Wastes, Wild and Scenic Rivers, and WSAs
Tiffany Rubalcaba	BLM KFO Wildlife Biologist	Special Status Animal and Plant Species, Wildlife (Aquatic & Terrestrial)
Matt Rustand	BLM RGFO Wildlife Biologist	Migratory Birds, Special Status Species, Wildlife (Aquatic & Terrestrial)
Eric Scherff	BLM LSFO Hydrologist	Soils and Water Resources
Linda Skinner	BLM RGFO Outdoor Recreation Planner	ACECs, Lands with Wilderness Characteristics, Visual Resources, Wild and Scenic Rivers, and WSAs
Melissa Smeins	BLM RGFO Geologist	Minerals, Paleontological Resources, Soils, Wastes, Water Resources
Amy Stillings	BLM COSO Economist	Environmental Justice, Socioeconomics
Lukas Trout	BLM WRFO Archaeologist	Cultural Resources, Native American Religious Concerns, Paleontological Resources
Leah Waldner	BLM COSO Sage-Grouse Coordinator	Greater Sage-grouse
Monica Weimer	BLM RGFO Archaeologist	Cultural Resources, Native American Religious Concerns
Thomas L. Williams	USFS Regional Minerals & Geology Program Manager	Cooperating Agency Support and Review
Shawn Wisner	BLM WRFO Wildlife Biologist	Migratory Birds, Riparian Zones & Wetlands, Special Status Species, Wildlife (Aquatic & Terrestrial)
Heather Woodruff	BLM WRFO Ecologist, Range Management Specialist	ACECs, Forest Management, Invasive Plants, Prime and Unique Farmlands, Special Status Plant Species, Vegetation, Wild Horses & Burros
Carmia Woolley	Acting BLM COSO Natural Resource Specialist	NEPA Compliance
Bill Wyatt	BLM KFO Archaeologist	Cultural Resources, Native American Religious Concerns, Paleontological Resources

**Appendix A. Lease Sale Parcel List with Proposed Stipulations and
Parcels under Consideration for Deferral**

2022 Q1 Oil & Gas Scoping Parcel List
Total Parcel Count: 119 Total Acres: 141675.220

— NOTE: PARCELS UNDER CONSIDERATION FOR DEFERRAL ARE HIGHLIGHTED IN GRAY. —

PARCEL ID: 6180

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 31 S., R. 52 W., 6TH PM

Sec. 2 LOTS 1,4;

Sec. 2 S1/2NW1/4,SW1/4;

Sec. 4 N1/2SE1/4,SE1/4SE1/4;

Sec. 12 SW1/4.

Las Animas County

615.69 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

EOI #CO00016733

PARCEL ID: 0173

CO, Royal Gorge Field Office, BLM, ACQ

T. 31 S., R. 52 W., 6TH PM

Sec. 3 E1/2SW1/4, SW1/4SW1/4, SW1/4SE1/4.

Las Animas County

160 Acres

75.00 % US Mineral Interest

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or

riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016733

PARCEL ID: 6181

CO, Royal Gorge Field Office, BLM, ACQ

T. 31 S., R. 52 W., 6TH PM

Sec. 3 S1/2NW1/4, NW1/4SW1/4;

Sec. 4 SE1/4NE1/4.

Las Animas County

160 Acres

50.00 % US Mineral Interest

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016733

PARCEL ID: 0176

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 31 S., R. 52 W., 6TH PM

Sec. 6 LOTS 1-6;

Sec. 6 SE1/4NW1/4.

Las Animas County

321.18 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a

one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016733

PARCEL ID: 0178

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 31 S., R. 52 W., 6TH PM

Sec. 17 W1/2;

Sec. 18 SE1/4NE1/4, E1/2SE1/4, SW1/4SE1/4;

Sec. 19 LOTS 4;

Sec. 19 E1/2NW1/4, SE1/4SW1/4.

Las Animas County

638.11 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016733

PARCEL ID: 0131

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 29 S., R. 53 W., 6TH PM

Sec. 20 E1/2NE1/4,SW1/4NE1/4,SE1/4NW1/4,E1/2SW1/4,SE1/4;

Sec. 21 N1/2,NE1/4SW1/4,S1/2SW1/4,SE1/4;

Sec. 22 W1/2NE1/4,W1/2;

Sec. 23 E1/2,N1/2NW1/4,SE1/4NW1/4;

Sec. 24 ALL.

Las Animas County

2480 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016711

PARCEL ID: 0132

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 29 S., R. 53 W., 6TH PM

Sec. 25 E1/2,NE1/4NW1/4,SE1/4SW1/4;

Sec. 26 N1/2NE1/4,S1/2SW1/4;

Sec. 27 N1/2SW1/4;

Sec. 28 N1/2,N1/2S1/2,SW1/4SW1/4;

Sec. 29 NE1/4NW1/4,NW1/4SW1/4,S1/2SW1/4,SE1/4;

Sec. 30 LOTS 1-4;

Sec. 30 E1/2,E1/2W1/2.

Las Animas County

2114.68 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016711

PARCEL ID: 0133

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 29 S., R. 53 W., 6TH PM

Sec. 31 LOTS 1-4;

Sec. 31 E1/2,E1/2W1/2;

Sec. 32 ALL;

Sec. 33 NW1/4NE1/4,S1/2NE1/4,W1/2;

Sec. 34 S1/2NW1/4,SW1/4;

Sec. 35 S1/2NE1/4,N1/2SE1/4.

Las Animas County

2115.16 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016711

PARCEL ID: 6173

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 30 S., R. 53 W., 6TH PM

Sec. 1 LOTS 1-4;

Sec. 1 S1/2N1/2;

Sec. 2 LOTS 3,4;

Sec. 2 S1/2NW1/4;

Sec. 3 S1/2;

Sec. 4 LOTS 2-4;

Sec. 4 S1/2N1/2,S1/2;

Sec. 5 LOTS 4;

Sec. 5 SW1/4NE1/4,SW1/4NW1/4,W1/2SW1/4,N1/2SE1/4,SE1/4SE1/4.

Las Animas County

1721.09 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016720

PARCEL ID: 0147

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 30 S., R. 53 W., 6TH PM

Sec. 6 LOTS 1-4;

Sec. 7 NE1/4,SE1/4SE1/4;

Sec. 8 E1/2,NW1/4;

Sec. 9 ALL;

Sec. 10 ALL.

Las Animas County

2120.27 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016720

PARCEL ID: 6174

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 30 S., R. 53 W., 6TH PM

Sec. 11 S1/2;

Sec. 12 S1/2SW1/4;

Sec. 13 N1/2NW1/4;

Sec. 14 S1/2;

Sec. 15 N1/2;

Sec. 17 NE1/4,NW1/4NW1/4,W1/2SW1/4;

Sec. 18 LOTS 4;

Sec. 18 E1/2SW1/4.

Las Animas County

1520.56 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016720

PARCEL ID: 0149

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 30 S., R. 53 W., 6TH PM

Sec. 19 LOTS 1,2,4;

Sec. 19 NE1/4NE1/4, SE1/4SW1/4;

Sec. 20 W1/2NE1/4, SE1/4NE1/4, NW1/4NW1/4, S1/2;

Sec. 29 N1/2, SW1/4, N1/2SE1/4;

Sec. 30 LOTS 1-4;

Sec. 30 E1/2W1/2, SE1/4;

Sec. 31 LOTS 1-4;

Sec. 31 E1/2NE1/4, E1/2W1/2;

Sec. 32 NE1/4, N1/2NW1/4, E1/2SE1/4.

Las Animas County

2440.55 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or

other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016721

PARCEL ID: 0150

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 30 S., R. 53 W., 6TH PM

Sec. 21 N1/2NE1/4, NE1/4NW1/4, NE1/4SE1/4, S1/2SE1/4;

Sec. 28 N1/2, E1/2SE1/4;

Sec. 33 NE1/4NE1/4, S1/2NE1/4, SW1/4NW1/4, W1/2SW1/4;

Sec. 34 N1/2, E1/2SW1/4, N1/2SE1/4;

Sec. 35 N1/2, E1/2SW1/4, N1/2SE1/4.

Las Animas County

1840 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016721

PARCEL ID: 0151

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 30 S., R. 53 W., 6TH PM

Sec. 22 N1/2NE1/4, SW1/4NE1/4, W1/2, W1/2SE1/4;

Sec. 23 N1/2, NE1/4SW1/4, NW1/4SE1/4;

Sec. 24 NW1/4NW1/4, SE1/4SW1/4, NW1/4SE1/4;

Sec. 25 W1/2;

Sec. 26 E1/2, SW1/4SW1/4;

Sec. 27 SE1/4NE1/4, N1/2NW1/4, SW1/4NW1/4, S1/2.

Las Animas County

2200 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except

the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016721

PARCEL ID: 0155

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 31 S., R. 53 W., 6TH PM

Sec. 1 SW1/4SW1/4;

Sec. 11 S1/2N1/2, SW1/4, N1/2SE1/4;

Sec. 12 N1/2N1/2, N1/2SW1/4;

Sec. 14 E1/2, N1/2NW1/4, SW1/4NW1/4, N1/2SW1/4, SE1/4SW1/4;

Sec. 15 SE1/4NE1/4, SW1/4SW1/4, E1/2SE1/4.

Las Animas County

1400 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016724

PARCEL ID: 0156

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 31 S., R. 53 W., 6TH PM

Sec. 2 LOTS 2-4;

Sec. 3 LOTS 1-3;

Sec. 3 N1/2SW1/4, SE1/4SW1/4, S1/2SE1/4;

Sec. 4 SW1/4SE1/4;

Sec. 9 N1/2.

Las Animas County

848.23 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016724

PARCEL ID: 0159

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 31 S., R. 53 W., 6TH PM

Sec. 5 S1/2NW1/4, SW1/4;

Sec. 6 LOTS 1;

Sec. 6 S1/2NE1/4, E1/2SE1/4;

Sec. 7 SE1/4SW1/4, NE1/4SE1/4;

Sec. 18 LOTS 3,4;

Sec. 18 W1/2E1/2, E1/2SW1/4, SE1/4SE1/4.

Las Animas County

887.04 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016724

PARCEL ID: 0162

CO, Royal Gorge Field Office, BLM, ACQ

T. 31 S., R. 53 W., 6TH PM

Sec. 8 E1/2.

Las Animas County

320 Acres

50.00 % US Mineral Interest

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016724

PARCEL ID: 0169

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 31 S., R. 53 W., 6TH PM

Sec. 20 NW1/4;

Sec. 29 E1/2NE1/4, SW1/4NE1/4;

Sec. 30 LOTS 1;

Sec. 30 NE1/4SW1/4;

Sec. 32 N1/2.

Las Animas County

679.87 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016724

PARCEL ID: 0170

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 31 S., R. 53 W., 6TH PM

Sec. 22 SE1/4NE1/4, NW1/4NW1/4, E1/2SE1/4;

Sec. 27 NW1/4NE1/4, E1/2SE1/4, SW1/4SE1/4.

Las Animas County

320 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016724

PARCEL ID: 0134

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 28 S., R. 54 W., 6TH PM

Sec. 1 NE1/4SE1/4,S1/2SE1/4;

Sec. 2 SE1/4SW1/4,SW1/4SE1/4;

Sec. 3 SW1/4,SW1/4SE1/4;

Sec. 4 LOTS 4;

Sec. 4 S1/2NW1/4,W1/2SW1/4,SE1/4SW1/4,NW1/4SE1/4;

Sec. 5 LOTS 1-4;

Sec. 5 S1/2N1/2,N1/2S1/2,S1/2SW1/4,SE1/4SE1/4;

Sec. 6 LOTS 1-3,6,8-14;

Sec. 6 S1/2NE1/4,SE1/4.

Las Animas County

1971.12 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016714

PARCEL ID: 0135

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 28 S., R. 54 W., 6TH PM

Sec. 7 LOTS 3,4,7-12;

Sec. 7 SE1/4;

Sec. 8 NE1/4,W1/2;

Sec. 17 NW1/4NE1/4;

Sec. 18 LOTS 1-12;

Sec. 18 W1/2E1/2,SE1/4SE1/4;

Sec. 19 LOTS 7,11,12;

Sec. 19 SE1/4.

Las Animas County

1979.68 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016715

PARCEL ID: 0136

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 28 S., R. 54 W., 6TH PM

Sec. 9 E1/2NE1/4,NW1/4,W1/2SW1/4,NE1/4SE1/4;

Sec. 10 W1/2NE1/4,NW1/4,NW1/4SW1/4;

Sec. 11 NW1/4NW1/4;

Sec. 12 SW1/4NE1/4,W1/2SE1/4,SE1/4SE1/4;

Sec. 13 E1/2NE1/4,SW1/4NE1/4,SE1/4NW1/4,W1/2SW1/4,NE1/4SE1/4;

Sec. 14 E1/2SE1/4;

Sec. 15 N1/2SW1/4,NW1/4SE1/4.

Las Animas County

1320 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016715

PARCEL ID: 0139

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 28 S., R. 54 W., 6TH PM

Sec. 20 E1/2NW1/4,SW1/4NW1/4,SW1/4,S1/2SE1/4;

Sec. 21 W1/2SW1/4,SE1/4;

Sec. 22 E1/2NE1/4,S1/2SW1/4,SE1/4;

Sec. 23 NE1/4,SW1/4NW1/4,W1/2SW1/4,E1/2SE1/4;

Sec. 24 W1/2NE1/4,SE1/4NE1/4,NW1/4,NE1/4SW1/4,N1/2SE1/4;

Sec. 25 W1/2NW1/4,SE1/4NW1/4,SW1/4,SW1/4SE1/4;

Sec. 26 E1/2,SW1/4NW1/4,NW1/4SW1/4.

Las Animas County

2400 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016715

PARCEL ID: 0140

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 28 S., R. 54 W., 6TH PM

Sec. 27 N1/2,N1/2S1/2,S1/2SW1/4,SW1/4SE1/4;

Sec. 33 NE1/4,E1/2NW1/4,SW1/4NW1/4,SW1/4,N1/2SE1/4,SW1/4SE1/4;

Sec. 34 N1/2,N1/2S1/2,S1/2SE1/4;

Sec. 35 ALL.

Las Animas County

2360 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016715

PARCEL ID: 0141

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 28 S., R. 54 W., 6TH PM

Sec. 28 NE1/4,W1/2NW1/4,SE1/4SW1/4,S1/2SE1/4;

Sec. 29 SE1/4NE1/4,N1/2NW1/4,SW1/4NW1/4,SE1/4SW1/4,N1/2SE1/4,SW1/4SE1/4;

Sec. 30 LOTS 4-12;

Sec. 30 E1/2NE1/4,SW1/4NE1/4,N1/2SE1/4,SW1/4SE1/4;

Sec. 31 LOTS 1-9,11,12;

Sec. 31 E1/2;

Sec. 32 NW1/4NE1/4,N1/2NW1/4,SW1/4NW1/4,SE1/4SW1/4,SE1/4.

Las Animas County
2423.76 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016715

PARCEL ID: 0137

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 28 S., R. 55 W., 6TH PM

Sec. 1 LOTS 1-4;

Sec. 1 S1/2N1/2,N1/2S1/2,SE1/4SW1/4,S1/2SE1/4;

Sec. 2 LOTS 1-4;

Sec. 2 S1/2NE1/4,SW1/4SW1/4,N1/2SE1/4;

Sec. 3 SE1/4NE1/4,S1/2;

Sec. 10 N1/2N1/2,S1/2NE1/4,SW1/4NW1/4,NE1/4SW1/4,NW1/4SE1/4.

Las Animas County
1651.6 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-23 BLM Stipulation to protect bald eagle winter roost sites within a one-half mile buffer around the site

For the following lands:

T. 28 S., R. 55 W., 6TH PM,

Sec. 3 SE1/4NE1/4,S1/2;

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

PARCEL ID: 0142

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 28 S., R. 55 W., 6TH PM

Sec. 11 E1/2, E1/2W1/2, W1/2NW1/4;

Sec. 12 ALL;

Sec. 13 N1/2, N1/2S1/2, SW1/4SW1/4, SE1/4SE1/4;

Sec. 14 E1/2, E1/2W1/2.

Las Animas County

2240 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016717

PARCEL ID: 6171

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 28 S., R. 55 W., 6TH PM

Sec. 20 NE1/4NE1/4;

Sec. 21 ALL;

Sec. 22 W1/2W1/2;

Sec. 28 N1/2, N1/2S1/2, SE1/4SW1/4, SW1/4SE1/4;

Sec. 29 NE1/4SE1/4;

Sec. 33 NE1/4NW1/4.

Las Animas County

1480 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-09 BLM Stipulation to protect big game (mule deer, elk, pronghorn antelope, and bighorn sheep) winter range, including crucial winter habitat and other definable winter range as mapped by the Colorado Division of Wildlife.

For the following lands:

T. 28 S., R. 55 W., 6TH PM,

Sec. 21 ALL;

Sec. 28 N1/2,N1/2S1/2,SE1/4SW1/4;

Sec. 29 NE1/4SE1/4;

CO-12 BLM Stipulation to protect Rocky Mountain bighorn sheep lambing

For the following lands:

T. 28 S., R. 55 W., 6TH PM,

Sec. 21 ALL;

Sec. 28 N1/2,N1/2S1/2,SE1/4SW1/4,SW1/4SE1/4;

Sec. 29 NE1/4SE1/4;

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016719

PARCEL ID: 0146

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 28 S., R. 55 W., 6TH PM

Sec. 22 E1/2;

Sec. 23 SE1/4SW1/4,S1/2SE1/4;

Sec. 24 SW1/4SW1/4;

Sec. 25 SE1/4NE1/4,NW1/4NW1/4,NE1/4SW1/4,S1/2S1/2,N1/2SE1/4;

Sec. 26 E1/2,NE1/4NW1/4,S1/2NW1/4;

Sec. 27 E1/2NE1/4,NE1/4SE1/4;

Sec. 34 E1/2SE1/4;

Sec. 35 N1/2,N1/2S1/2,S1/2SW1/4,SE1/4SE1/4.

Las Animas County

2080 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian

vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016719

PARCEL ID: 0148

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 28 S., R. 55 W., 6TH PM

Sec. 23 NE1/4NE1/4;

Sec. 24 W1/2NW1/4, SE1/4NW1/4, NW1/4SE1/4.

Las Animas County

200 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016719

PARCEL ID: 6172

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 28 S., R. 55 W., 6TH PM

Sec. 29 SW1/4SE1/4;

Sec. 32 NE1/4,E1/2SE1/4;

Sec. 33 SE1/4NE1/4,SW1/4,S1/2SE1/4;

Sec. 34 S1/2NW1/4,SW1/4.

Las Animas County

800 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-09 BLM Stipulation to protect big game (mule deer, elk, pronghorn antelope, and bighorn sheep) winter range, including crucial winter habitat and other definable winter range as mapped by the Colorado Division of Wildlife.

For the following lands:

T. 28 S., R. 55 W., 6TH PM,

Sec. 29 SW1/4SE1/4;

Sec. 32 NE1/4;

CO-12 BLM Stipulation to protect Rocky Mountain bighorn sheep lambing

For the following lands:

T. 28 S., R. 55 W., 6TH PM,

Sec. 29 SW1/4SE1/4;

Sec. 32 NE1/4,E1/2SE1/4;

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

EOI #CO00016719

PARCEL ID: 6187

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 29 S., R. 56 W., 6TH PM

Sec. 19 LOT 1 EXCL PCMS;

Sec. 19 NW1/4NE1/4,NE1/4NW1/4;

Sec. 29 ALL;

Sec. 30 E1/2E1/2,SW1/4SE1/4;

Sec. 31 LOTS 3,4;

Sec. 31 S1/2NE1/4,E1/2SW1/4,SE1/4;

Sec. 32 ALL.

Las Animas County

1974.83 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-09 BLM Stipulation to protect big game (mule deer, elk, pronghorn antelope, and bighorn sheep) winter range, including crucial winter habitat and other definable winter range as mapped by the Colorado Division of Wildlife.

CO-12 BLM Stipulation to protect Rocky Mountain bighorn sheep lambing

For the following lands:

T. 29 S., R. 56 W., 6TH PM,

Sec. 19 NW1/4NE1/4,NE1/4NW1/4;

Sec. 30 E1/2E1/2, SW1/4SE1/4;

Sec. 31 LOTS 3,4, S1/2NE1/4,E1/2SW1/4;

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except

the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-23 BLM Stipulation to protect bald eagle winter roost sites within a one-half mile buffer around the site

For the following lands:

T. 29 S., R. 56 W., 6TH PM,

Sec. 19 NW1/4NE1/4;

Sec. 30 E1/2E1/2,SW1/4SE1/4;

Sec. 31 LOTS 3,4, S1/2NE1/4,E1/2SW1/4;

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016741

PARCEL ID: 6189

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 29 S., R. 56 W., 6TH PM

Sec. 20 N1/2NE1/4,NE1/4NW1/4,S1/2NW1/4,N1/2SW1/4,SE1/4SW1/4,SE1/4;

Sec. 21 E1/2,SW1/4;

Sec. 22 S1/2NW1/4,W1/2SE1/4;

Sec. 23 NE1/4.

Las Animas County

1280 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-09 BLM Stipulation to protect big game (mule deer, elk, pronghorn antelope, and bighorn sheep) winter range, including crucial winter habitat and other definable winter range as mapped by the Colorado Division of Wildlife.

For the following lands:

T. 29 S., R. 56 W., 6TH PM,

Sec. 20 N1/2NE1/4,NE1/4NW1/4,S1/2NW1/4,N1/2SW1/4,SE1/4SW1/4,SE1/4;

Sec. 21 SW1/4;

Sec. 23 NE1/4;

CO-12 BLM Stipulation to protect Rocky Mountain bighorn sheep lambing

For the following lands:

T. 29 S., R. 56 W., 6TH PM,

Sec. 20 N1/2NE1/4,NE1/4NW1/4,S1/2NW1/4,N1/2SW1/4, SE1/4SW1/4;

Sec. 23 NE1/4;

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-23 BLM Stipulation to protect bald eagle winter roost sites within a one-half mile buffer around the site

For the following lands:

T. 29 S., R. 56 W., 6TH PM,

Sec. 20 NE1/4NW1/4,S1/2NW1/4;

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016741

PARCEL ID: 6188

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 29 S., R. 56 W., 6TH PM

Sec. 24 SW1/4NE1/4,W1/2,W1/2SE1/4;

Sec. 25 NW1/4NE1/4,W1/2;

Sec. 27 NE1/4,SW1/4.

Las Animas County

1120 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-09 BLM Stipulation to protect big game (mule deer, elk, pronghorn antelope, and bighorn sheep) winter range, including crucial winter habitat and other definable winter range as mapped by the Colorado Division of Wildlife.

For the following lands:

T. 29 S., R. 56 W., 6TH PM,

Sec. 24 SW1/4NE1/4,W1/2,W1/2SE1/4;

Sec. 25 NW1/4NE1/4,W1/2;

CO-12 BLM Stipulation to protect Rocky Mountain bighorn sheep lambing

For the following lands:

T. 29 S., R. 56 W., 6TH PM,

Sec. 24 SW1/4NE1/4,W1/2,W1/2SE1/4;

Sec. 25 NW1/4NE1/4,W1/2;

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or

other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016741

PARCEL ID: 0194

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 29 S., R. 56 W., 6TH PM

Sec. 28 ALL;

Sec. 33 ALL;

Sec. 34 N1/2N1/2,SE1/4NE1/4,SW1/4NW1/4,NW1/4SW1/4,S1/2S1/2;

Sec. 35 NE1/4,N1/2NW1/4,SW1/4NW1/4,S1/2SW1/4,N1/2SE1/4,SW1/4SE1/4.

Las Animas County

2200 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-09 BLM Stipulation to protect big game (mule deer, elk, pronghorn antelope, and bighorn sheep) winter range, including crucial winter habitat and other definable winter range as mapped by the Colorado Division of Wildlife.

For the following lands:

T. 29 S., R. 56 W., 6TH PM,

Sec. 34 N1/2N1/2,SE1/4NE1/4,S1/2S1/2;

Sec. 35 NE1/4,N1/2NW1/4,SW1/4NW1/4,S1/2SW1/4,N1/2SE1/4,SW1/4SE1/4;

CO-12 BLM Stipulation to protect Rocky Mountain bighorn sheep lambing

For the following lands:

T. 29 S., R. 56 W., 6TH PM,

Sec. 34 N1/2N1/2,SE1/4NE1/4,S1/2S1/2;

Sec. 35 NE1/4,N1/2NW1/4,SW1/4NW1/4,S1/2SW1/4,N1/2SE1/4,SW1/4SE1/4;

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016741

PARCEL ID: 6190

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 30 S., R. 56 W., 6TH PM

Sec. 1 LOTS 1-4;
Sec. 1 S1/2N1/2,S1/2;
Sec. 2 LOTS 3,4;
Sec. 2 S1/2NW1/4,S1/2S1/2;
Sec. 3 LOTS 1-4;
Sec. 3 S1/2N1/2,SW1/4,NW1/4SE1/4;
Sec. 4 LOTS 1-4;
Sec. 4 S1/2N1/2,N1/2S1/2,S1/2SE1/4;
Sec. 5 LOTS 1-4.

Las Animas County
2200.28 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-09 BLM Stipulation to protect big game (mule deer, elk, pronghorn antelope, and bighorn sheep) winter range, including crucial winter habitat and other definable winter range as mapped by the Colorado Division of Wildlife.

For the following lands:

T. 30 S., R. 56 W., 6TH PM,
Sec. 1 LOTS 1-4, S1/2N1/2,S1/2;
Sec. 2 LOTS 3,4, S1/2NW1/4,S1/2S1/2;
Sec. 3 LOTS 1-4, S1/2N1/2,SW1/4,NW1/4SE1/4;
Sec. 4 LOTS 1-4, S1/2N1/2,N1/2S1/2,S1/2SE1/4;

CO-12 BLM Stipulation to protect Rocky Mountain bighorn sheep lambing

For the following lands:

T. 30 S., R. 56 W., 6TH PM,
Sec. 1 LOTS 1-4, S1/2N1/2,S1/2;
Sec. 2 LOTS 3,4, S1/2NW1/4,S1/2S1/2;
Sec. 3 LOTS 1-4, S1/2N1/2,SW1/4,NW1/4SE1/4;
Sec. 4 N1/2S1/2,S1/2SE1/4;

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016752

PARCEL ID: 0204

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 30 S., R. 56 W., 6TH PM

Sec. 5 S1/2N1/2,S1/2;
Sec. 6 LOTS 1-7;
Sec. 6 S1/2NE1/4,SE1/4NW1/4,E1/2SW1/4,SE1/4;
Sec. 7 LOTS 1-4;
Sec. 7 E1/2,E1/2W1/2;
Sec. 18 LOTS 1-4;
Sec. 18 E1/2,E1/2W1/2.

Las Animas County
2418.2 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.
CO-09 BLM Stipulation to protect big game (mule deer, elk, pronghorn antelope, and bighorn sheep) winter range, including crucial winter habitat and other definable winter range as mapped by the Colorado Division of Wildlife.
For the following lands:
T. 30 S., R. 56 W., 6TH PM,
Sec. 5 S1/2;
CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.
CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.
CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.
CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.
CO-39 BLM Stipulation to protect cultural resources
CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016752

PARCEL ID: 0206

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 30 S., R. 56 W., 6TH PM

Sec. 8 ALL;
Sec. 9 NE1/4NE1/4, NW1/4NW1/4, S1/2N1/2, S1/2;
Sec. 10 SE1/4NE1/4, N1/2NW1/4, SW1/4NW1/4, E1/2SW1/4;
Sec. 11 NE1/4NE1/4, W1/2, W1/2SE1/4, SE1/4SE1/4;
Sec. 17 N1/2, SW1/4SW1/4.

Las Animas County
2280 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.
CO-09 BLM Stipulation to protect big game (mule deer, elk, pronghorn antelope, and bighorn sheep) winter range, including crucial winter habitat and other definable winter range as mapped by the Colorado Division of Wildlife.

For the following lands:

T. 30 S., R. 56 W., 6TH PM,

Sec. 8 ALL;

Sec. 9 NE1/4NE1/4, NW1/4NW1/4, S1/2N1/2, S1/2;

Sec. 10 SE1/4NE1/4, N1/2NW1/4, SW1/4NW1/4, E1/2SW1/4;

Sec. 11 NE1/4NE1/4, W1/2, W1/2SE1/4, SE1/4SE1/4;

CO-12 BLM Stipulation to protect Rocky Mountain bighorn sheep lambing

For the following lands:

T. 30 S., R. 56 W., 6TH PM,

Sec. 9 NE1/4NE1/4, S1/2N1/2, S1/2;

Sec. 10 SE1/4NE1/4, N1/2NW1/4, SW1/4NW1/4, E1/2SW1/4;

Sec. 11 NE1/4NE1/4, W1/2, W1/2SE1/4, SE1/4SE1/4;

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016752

PARCEL ID: 6192

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 30 S., R. 56 W., 6TH PM

Sec. 12 ALL;

Sec. 13 N1/2, SW1/4;

Sec. 14 E1/2, NW1/4, E1/2SW1/4;

Sec. 15 SW1/4, W1/2SE1/4.

Las Animas County

1920 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-09 BLM Stipulation to protect big game (mule deer, elk, pronghorn antelope, and bighorn sheep) winter range, including crucial winter habitat and other definable winter range as mapped by the Colorado Division of Wildlife.

For the following lands:

T. 30 S., R. 56 W., 6TH PM,

Sec. 12 ALL; Sec. 13 N1/2;

Sec. 14 E1/2, NW1/4, E1/2SW1/4;

Sec. 15 SW1/4, W1/2SE1/4;

CO-12 BLM Stipulation to protect Rocky Mountain bighorn sheep lambing

For the following lands:

T. 30 S., R. 56 W., 6TH PM,

Sec. 12 ALL;

Sec. 13 N1/2;

Sec. 14 E1/2, NW1/4, E1/2SW1/4;

Sec. 15 SW1/4, W1/2SE1/4;

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016752

PARCEL ID: 6191

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 30 S., R. 56 W., 6TH PM

Sec. 19 LOTS 1-4;

Sec. 19 NE1/4SW1/4;

Sec. 20 SE1/4;

Sec. 29 NE1/4, S1/2;

Sec. 30 LOTS 3, 4;

Sec. 30 E1/2, SE1/4NW1/4, E1/2SW1/4;

Sec. 31 LOTS 1;

Sec. 31 N1/2NE1/4;

Sec. 32 N1/2.

Las Animas County

1809.2 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016752

PARCEL ID: 0203

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 30 S., R. 56 W., 6TH PM

Sec. 21 E1/2NE1/4,S1/2;

Sec. 22 W1/2E1/2,W1/2,NE1/4SE1/4;

Sec. 27 N1/2NE1/4,SW1/4NE1/4,W1/2,N1/2SE1/4;

Sec. 28 ALL;

Sec. 33 E1/2E1/2,W1/2SW1/4,SE1/4SW1/4,SW1/4SE1/4;

Sec. 34 W1/2NW1/4,NW1/4SW1/4.

Las Animas County

2520 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-09 BLM Stipulation to protect big game (mule deer, elk, pronghorn antelope, and bighorn sheep) winter range, including crucial winter habitat and other definable winter range as mapped by the Colorado Division of Wildlife.

For the following lands:

T. 30 S., R. 56 W., 6TH PM,

Sec. 22 W1/2E1/2,W1/2,NE1/4SE1/4;

Sec. 27 N1/2NE1/4,SW1/4NE1/4,W1/2,N1/2SE1/4;

Sec. 28 ALL;

Sec. 33 E1/2E1/2, W1/2SW1/4,SE1/4SW1/4,SW1/4SE1/4;

Sec. 34 W1/2NW1/4,NW1/4SW1/4;

CO-12 BLM Stipulation to protect Rocky Mountain bighorn sheep lambing

For the following lands:

T. 30 S., R. 56 W., 6TH PM,

Sec. 22 W1/2E1/2,W1/2,NE1/4SE1/4;

Sec. 27 N1/2NE1/4,SW1/4NE1/4,W1/2,N1/2SE1/4;

Sec. 28 ALL;

Sec. 33 E1/2E1/2,W1/2SW1/4,SE1/4SW1/4,SW1/4SE1/4;

Sec. 34 W1/2NW1/4,NW1/4SW1/4;

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016752

PARCEL ID: 0205

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 30 S., R. 56 W., 6TH PM

Sec. 23 E1/2,E1/2W1/2;

Sec. 24 NW1/4;

Sec. 25 ALL;

Sec. 26 E1/2E1/2;

Sec. 34 S1/2NE1/4,SE1/4;

Sec. 35 NE1/4NE1/4,S1/2N1/2,S1/2.

Las Animas County

2200 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-09 BLM Stipulation to protect big game (mule deer, elk, pronghorn antelope, and bighorn sheep) winter range, including crucial winter habitat and other definable winter range as mapped by the Colorado Division of Wildlife.

CO-12 BLM Stipulation to protect Rocky Mountain bighorn sheep lambing

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016752

PARCEL ID: 0197

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 32 S., R. 56 W., 6TH PM

Sec. 19 LOTS 3,4;

Sec. 19 NE1/4NE1/4,SW1/4NE1/4,E1/2SW1/4,W1/2SE1/4;

Sec. 20 W1/2E1/2,E1/2NW1/4,SW1/4,SE1/4SE1/4;

Sec. 29 ALL;

Sec. 30 LOTS 1,3;

Sec. 30 SE1/4NE1/4,E1/2NW1/4.

Las Animas County

1633.23 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.
CO-09 BLM Stipulation to protect big game (mule deer, elk, pronghorn antelope, and bighorn sheep) winter range, including crucial winter habitat and other definable winter range as mapped by the Colorado Division of Wildlife.

For the following lands:

T. 32 S., R. 56 W., 6TH PM,
Sec. 19 NE1/4NE1/4,SW1/4NE1/4,E1/2SW1/4,W1/2SE1/4;
Sec. 20 W1/2E1/2,E1/2NW1/4,SW1/4;
Sec. 29 ALL;
Sec. 30 LOTS 1,3, SE1/4NE1/4, E1/2NW1/4;

CO-12 BLM Stipulation to protect Rocky Mountain bighorn sheep lambing

For the following lands:

T. 32 S., R. 56 W., 6TH PM,
Sec. 19 NE1/4NE1/4,SW1/4NE1/4,E1/2SW1/4,W1/2SE1/4;
Sec. 20 W1/2E1/2,E1/2NW1/4,SW1/4;
Sec. 29 ALL;
Sec. 30 LOTS 1,3, SE1/4NE1/4, E1/2NW1/4;

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016742

PARCEL ID: 0200

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 32 S., R. 56 W., 6TH PM

Sec. 21 S1/2SW1/4,SE1/4SE1/4;
Sec. 28 ALL;
Sec. 31 SE1/4SW1/4,W1/2SE1/4;
Sec. 32 N1/2,E1/2SW1/4,N1/2SE1/4;
Sec. 33 N1/2,N1/2S1/2,SE1/4SE1/4.

Las Animas County

1880 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-09 BLM Stipulation to protect big game (mule deer, elk, pronghorn antelope, and bighorn sheep) winter range, including crucial winter habitat and other definable winter range as mapped by the Colorado Division of Wildlife.

For the following lands:

T. 32 S., R. 56 W., 6TH PM,

Sec. 31 W1/2SE1/4;

Sec. 32 N1/2;

CO-12 BLM Stipulation to protect Rocky Mountain bighorn sheep lambing

For the following lands:

T. 32 S., R. 56 W., 6TH PM,

Sec. 31 W1/2SE1/4;

Sec. 32 N1/2;

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016742

PARCEL ID: 0201

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 32 S., R. 56 W., 6TH PM

Sec. 22 SW1/4NE1/4,S1/2NW1/4,W1/2SE1/4,SE1/4SE1/4;

Sec. 23 W1/2NE1/4,NW1/4,S1/2SW1/4;

Sec. 25 SW1/4SW1/4;

Sec. 26 W1/2SW1/4,E1/2SE1/4;

Sec. 27 NE1/4NE1/4,W1/2NE1/4,NW1/4,S1/2;

Sec. 34 N1/2,SW1/4;

Sec. 35 SE1/4NE1/4,W1/2NW1/4,NE1/4SE1/4.

Las Animas County

2000 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-09 BLM Stipulation to protect big game (mule deer, elk, pronghorn antelope, and bighorn sheep) winter range, including crucial winter habitat and other definable winter range as mapped by the Colorado Division of Wildlife.

For the following lands:

T. 32 S., R. 56 W., 6TH PM,

Sec. 23 NW1/4;

CO-12 BLM Stipulation to protect Rocky Mountain bighorn sheep lambing

For the following lands:

T. 32 S., R. 56 W., 6TH PM,

Sec. 23 NW1/4;

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016742

PARCEL ID: 6182

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 32 S., R. 57 W., 6TH PM

Sec. 21 E1/2NE1/4;

Sec. 22 SE1/4;

Sec. 24 N1/2;

Sec. 25 N1/2S1/2,SE1/4SW1/4,S1/2SE1/4;

Sec. 26 W1/2;

Sec. 27 N1/2NW1/4,SE1/4NW1/4,SW1/4SW1/4.

Las Animas County

1320 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-09 BLM Stipulation to protect big game (mule deer, elk, pronghorn antelope, and bighorn sheep) winter range, including crucial winter habitat and other definable winter range as mapped by the Colorado Division of Wildlife.

For the following lands:

T. 32 S., R. 57 W., 6TH PM,

Sec. 21 E1/2NE1/4;

Sec. 25 N1/2S1/2,S1/2SE1/4;

CO-12 BLM Stipulation to protect Rocky Mountain bighorn sheep lambing

For the following lands:

T. 32 S., R. 57 W., 6TH PM,

Sec. 21 E1/2NE1/4;

Sec. 25 N1/2S1/2,S1/2SE1/4;

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016734

PARCEL ID: 0182

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 32 S., R. 57 W., 6TH PM

Sec. 31 SW1/4NE1/4;

Sec. 32 NE1/4NE1/4;

Sec. 33 SW1/4NW1/4;

Sec. 34 S1/2.

Las Animas County

440 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016734

PARCEL ID: 6183

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 33 S., R. 57 W., 6TH PM

Sec. 2 LOTS 1-4;

Sec. 4 E1/2SE1/4, SW1/4SE1/4;

Sec. 9 N1/2NE1/4;

Sec. 10 N1/2, E1/2SW1/4, NE1/4SE1/4, W1/2SE1/4;

Sec. 12 NE1/4NE1/4.

Las Animas County

923.27 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a

one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016735

PARCEL ID: 0180

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 33 S., R. 57 W., 6TH PM

Sec. 5 LOTS 1-3;

Sec. 5 S1/2NE1/4,SE1/4NW1/4,E1/2SW1/4;

Sec. 6 LOTS 2;

Sec. 6 SW1/4NE1/4;

Sec. 7 LOTS 1;

Sec. 7 N1/2NE1/4,NE1/4NW1/4;

Sec. 8 E1/2SE1/4.

Las Animas County

639.2 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016735

PARCEL ID: 0190

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 33 S., R. 57 W., 6TH PM

Sec. 13 E1/2NE1/4, NE1/4NW1/4, NE1/4SE1/4;

Sec. 14 SW1/4NW1/4;

Sec. 15 W1/2;

Sec. 23 NE1/4NE1/4, SW1/4NE1/4, SW1/4NW1/4, SW1/4SE1/4;

Sec. 24 NE1/4, E1/2NW1/4.

Las Animas County
920 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016735

PARCEL ID: 0193

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 33 S., R. 57 W., 6TH PM

Sec. 21 N1/2;

Sec. 26 SE1/4SE1/4;

Sec. 27 E1/2;

Sec. 35 E1/2NE1/4, SW1/4NE1/4, SE1/4.

Las Animas County
960 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016735

PARCEL ID: 0196

CO, Royal Gorge Field Office, BLM, ACQ

T. 33 S., R. 57 W., 6TH PM
Sec. 25 NW1/4, N1/2SW1/4;
Sec. 26 SE1/4NE1/4, NE1/4SE1/4.

Las Animas County
320 Acres
50.00 % US Mineral Interest

- CO-03** BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.
- CO-18** BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.
- CO-19** BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.
- CO-28** BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.
- CO-34** BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.
- CO-39** BLM Stipulation to protect cultural resources
- CO-56** BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016735

PARCEL ID: 0199

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 33 S., R. 57 W., 6TH PM
Sec. 30 E1/2SE1/4;
Sec. 31 E1/2SE1/4;
Sec. 32 W1/2.

Las Animas County
480 Acres

- CO-03** BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.
- CO-18** BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.
- CO-19** BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.
- CO-28** BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.
- CO-34** BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.
- CO-39** BLM Stipulation to protect cultural resources
- CO-56** BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016735

PARCEL ID: 0188 Split Estate

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 34 S., R. 57 W., 6TH PM

Sec. 6 LOTS 1-3, 5;

Sec. 6 S1/2NE1/4, SE1/4NW1/4, NE1/4SE1/4;

Sec. 7 SE1/4SE1/4;

Sec. 17 S1/2.

Las Animas County

686.97 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016736

PARCEL ID: 6184 Split Estate

CO, Royal Gorge Field Office, BLM, ACQ

T. 34 S., R. 57 W., 6TH PM

Sec. 7 NE1/4, E1/2NW1/4, N1/2SE1/4.

Las Animas County

320 Acres

50.00 % US Mineral Interest

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources
CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016736

PARCEL ID: 0232

CO, Royal Gorge Field Office, FS:PAWNEE NG, PD

T. 8 N., R. 58 W., 6TH PM
Sec. 22 NE1/4SW1/4,NW1/4SE1/4;
Sec. 34 N1/2.

Weld County
400 Acres

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.
CO-39 BLM Stipulation to protect cultural resources
CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis
PNG2015-NSO-14-01 SMA Stipulation for Surface Resource Protection and Ecological Integrity.
PNG-R2-FS-2820-13 (92) SMA Stipulation

EOI #CO00016878

PARCEL ID: 0235

CO, Royal Gorge Field Office, FS:PAWNEE NG, PD

T. 12 N., R. 58 W., 6TH PM
Sec. 21 LOTS 1;
Sec. 21 SE1/4;
Sec. 26 N1/2;
Sec. 30 E1/2.

Weld County
881.24 Acres

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.
CO-39 BLM Stipulation to protect cultural resources
CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis
PNG2015-NSO-14-01 SMA Stipulation for Resource Protection and Ecological Integrity.
PNG-R2-FS-2820-13 (92) LN SMA Stipulation

EOI #CO00016878

PARCEL ID: 6185

CO, Royal Gorge Field Office, BLM, PD
PVT:BUREAU OF LAND MANAGEMENT

T. 32 S., R. 59 W., 6TH PM

Sec. 19 LOTS 1,2;
Sec. 19 SW1/4NE1/4,SE1/4NW1/4,NE1/4SW1/4,NW1/4SE1/4,SE1/4SE1/4;
Sec. 20 W1/2E1/2,E1/2W1/2,SW1/4SW1/4;
Sec. 29 E1/2,NW1/4,E1/2SW1/4,NW1/4SW1/4;
Sec. 30 E1/2NE1/4,SW1/4NE1/4;
Sec. 32 N1/2NE1/4,NE1/4NW1/4.

Las Animas County
1482.53 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.
CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.
CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.
CO-23 BLM Stipulation to protect bald eagle winter roost sites within a one-half mile buffer around the site
For the following lands:
T. 32 S., R. 59 W., 6TH PM,
Sec. 29 E1/2,NW1/4,E1/2SW1/4,NW1/4SW1/4;
Sec. 30 E1/2NE1/4;
Sec. 32 N1/2NE1/4,NE1/4NW1/4;
CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.
CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.
CO-39 BLM Stipulation to protect cultural resources
CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016739

PARCEL ID: 6186

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 32 S., R. 59 W., 6TH PM

Sec. 21 SE1/4;
Sec. 22 NW1/4NE1/4, E1/2NW1/4, W1/2SW1/4;
Sec. 27 W1/2SW1/4;
Sec. 28 ALL;
Sec. 33 NW1/4NW1/4, W1/2SE1/4, SE1/4SE1/4.

Las Animas County
1240 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.
CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-23 BLM Stipulation to protect bald eagle winter roost sites within a one-half mile buffer around the site

For the following lands:

T. 32 S., R. 59 W., 6TH PM,

Sec. 21 SE1/4;

Sec. 22 NW1/4NE1/4, E1/2NW1/4, W1/2SW1/4;

Sec. 28 ALL;

Sec. 33 NW1/4NW1/4, W1/2SE1/4, SE1/4SE1/4;

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016739

PARCEL ID: 0195

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 32 S., R. 59 W., 6TH PM

Sec. 23 SE1/4NE1/4,W1/2NW1/4,E1/2SE1/4;

Sec. 24 SW1/4NW1/4,NE1/4SW1/4;

Sec. 25 NW1/4,E1/2SW1/4,SW1/4SW1/4;

Sec. 26 N1/2,SE1/4SE1/4;

Sec. 35 NE1/4NE1/4,SW1/4NE1/4.

Las Animas County

1000 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-23 BLM Stipulation to protect bald eagle winter roost sites within a one-half mile buffer around the site

For the following lands:

T. 32 S., R. 59 W., 6TH PM,

Sec. 23 W1/2NW1/4;

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources
CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016739

PARCEL ID: 0234
CO, Royal Gorge Field Office, FS:PAWNEE NG, PD

T. 8 N., R. 60 W., 6TH PM
Sec. 24 SE1/4NW1/4.

Weld County
40 Acres

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.
CO-39 BLM Stipulation to protect cultural resources
CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis
PNG2015-NSO-14-01 SMA Stipulation for Surface Resource Protection and Ecological Integrity.
PNG-R2-FS-2820-13 (92) LN SMA Stipulation

EOI #CO00016878

PARCEL ID: 0231
CO, Royal Gorge Field Office, FS:PAWNEE NG, PD

T. 9 N., R. 60 W., 6TH PM
Sec. 24 NW1/4SW1/4.

Weld County
40 Acres

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.
CO-39 BLM Stipulation to protect cultural resources
CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis
PNG2015-NSO-14-01 SMA Stipulation for Surface Resource Protection and Ecological Integrity.
PNG-R2-FS-2820-13 (92) LN SMA Stipulation

EOI #CO00016878

PARCEL ID: 0229
CO, Royal Gorge Field Office, FS:PAWNEE NG, PD

T. 9 N., R. 60 W., 6TH PM
Sec. 31 LOTS 1,2;
Sec. 31 E1/2NW1/4.

Weld County
161.32 Acres

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

PNG2015-NSO-14-01 SMA Stipulation for Surface Resource Protection and Ecological Integrity.

PNG-R2-FS-2820-13 (92) LN SMA Stipulation

EOI #CO00016878

PARCEL ID: 0130 Split Estate

CO, Royal Gorge Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 7 N., R. 63 W., 6TH PM

Sec. 28 NW1/4NE1/4,N1/2NW1/4.

Weld County

120 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-09 BLM Stipulation to protect big game (mule deer, elk, pronghorn antelope, and bighorn sheep) winter range, including crucial winter habitat and other definable winter range as mapped by the Colorado Division of Wildlife.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

EOI #CO00016636

PARCEL ID: 0260 Split Estate

CO, Royal Gorge Field Office, Private, PD

T. 32 S., R. 52 W., 6TH PM

Sec. 10 E1/2;

Sec. 17 SW1/4NE1/4,N1/2NW1/4,SE1/4NW1/4,SW1/4SW1/4,NW1/4SE1/4;

Sec. 20 NE1/4NW1/4,SE1/4;

Sec. 21 W1/2SW1/4,S1/2SE1/4;

Sec. 23 SW1/4SE1/4;

Sec. 29 E1/2NW1/4,NW1/4NW1/4.

Las Animas County

1080 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except

the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

EOI# CO00017089

PARCEL ID: 6206 Split Estate

CO, Royal Gorge Field Office, Private, PD

Private: BUREAU OF LAND MANAGEMENT

T. 32 S., R. 53 W., 6TH PM

Sec. 2 S1/2SW1/4;

Sec. 12 E1/2SW1/4.

Las Animas County

160 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

EOI# CO00017093

PARCEL ID: 0262 Split Estate

CO, Royal Gorge Field Office, Private, PD

T. 32 S., R. 53 W., 6TH PM

Sec. 25 NW1/4NW1/4,SE1/4NW1/4;

Sec. 26 SE1/4SW1/4;

Sec. 27 SE1/4NE1/4,SW1/4SW1/4,NE1/4SE1/4.

Las Animas County
240 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

EOI# CO00017093

PARCEL ID: 0256 Split Estate

CO, Royal Gorge Field Office, Private, PD

T. 32 S., R. 54 W., 6TH PM

Sec. 1 LOTS 1;

Sec. 1 SW1/4NE1/4,SE1/4NW1/4,N1/2SW1/4;

Sec. 2 LOTS 3,4;

Sec. 2 S1/2NW1/4,SW1/4,W1/2SE1/4.

Las Animas County
600.87 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

EOI# CO00017092

PARCEL ID: 0258 Split Estate

CO, Royal Gorge Field Office, Private, PD

T. 32 S., R. 54 W., 6TH PM
Sec. 19 SE1/4SW1/4;
Sec. 30 LOTS 4.

Las Animas County
94.8 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

EOI# CO00017092

PARCEL ID: 0233 Split Estate

CO, Royal Gorge Field Office, Private: BUREAU OF LAND MANAGEMENT, PD

T. 30 S., R. 55 W., 6TH PM
Sec. 27 SW1/4SE1/4.

Las Animas County
40 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

EOI# CO00016142

PARCEL ID: 6200 Split Estate
CO, Royal Gorge Field Office, Private, PD

T. 32 S., R. 55 W., 6TH PM
Sec. 4 LOTS 4;
Sec. 4 SW1/4NW1/4, W1/2SW1/4;
Sec. 5 S1/2;
Sec. 9 W1/2NW1/4.

Las Animas County
560.6 Acres

- CO-03** BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.
- CO-18** BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.
- CO-19** BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.
- CO-28** BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.
- CO-34** BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.
- CO-39** BLM Stipulation to protect cultural resources.
- CO-56** BLM Stipulation to alert lessee of potential supplementary air analysis.

EOI# CO00017090

PARCEL ID: 0243 Split Estate
CO, Royal Gorge Field Office, Private, PD

T. 32 S., R. 55 W., 6TH PM
Sec. 19 LOTS 1, 2;
Sec. 19 SE1/4NW1/4.

Las Animas County
126.45 Acres

- CO-03** BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.
- CO-18** BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.
- CO-19** BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.
- CO-28** BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.
- CO-34** BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

EOI# CO00017090

PARCEL ID: 0245 Split Estate

CO, Royal Gorge Field Office, Private, PD

T. 32 S., R. 55 W., 6TH PM

Sec. 31 LOTS 3.

Las Animas County

47.51 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

EOI# CO00017090

PARCEL ID: 0247 Split Estate

CO, Royal Gorge Field Office, Private, ACQ

T. 32 S., R. 55 W., 6TH PM

Sec. 34 SW1/4;

Sec. 35 NE1/4NE1/4, S1/2NE1/4, NW1/4, N1/2SE1/4.

Las Animas County

520 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or

other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

EOI# CO00017090

PARCEL ID: 0246 Split Estate

CO, Royal Gorge Field Office, Private, PD

T. 32 S., R. 55 W., 6TH PM

Sec. 35 NW1/4NE1/4, S1/2SE1/4.

Las Animas County

120 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

EOI# CO00017090

PARCEL ID: 0252 Split Estate

CO, Royal Gorge Field Office, Bureau of Land Management, PD, Private

T. 31 S., R. 58 W., 6TH PM

Sec. 1 LOTS 1;

Sec. 1 SW1/4,N1/2SE1/4;

Sec. 2 SWNE,SE EXCL PCMS;

Sec. 9 SWSE EXCL PCMS;

Sec. 10 S2NE,N2SE,SESE EXCL PCMS;

Sec. 11 NWNE,NENW,NESW,SE EXCL PCMS;

Sec. 12 SW1/4;

Sec. 13 NW1/4,E1/2SE1/4;

Sec. 14 N1/2;

Sec. 15 E1/2E1/2,NE1/4SW1/4,NW1/4SE1/4.

Las Animas County

1757.25 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-09 BLM Stipulation to protect bighorn sheep winter range.

For the following lands:

T. 31 S., R. 58 W., 6TH PM

Sec. 1 LOTS 1.

CO-12 BLM Stipulation to protect bighorn sheep lambing areas.

For the following lands:

T. 31 S., R. 58 W., 6TH PM

Sec. 1 LOTS 1;

Sec. 1 SW1/4,N1/2SE1/4;

Sec. 2 SWNE,SE EXCL PCMS;

Sec. 9 SWSE EXCL PCMS;

Sec. 10 S2NE,N2SE,SESE EXCL PCMS;

Sec. 11 NWNE,NENW,NESW,SE EXCL PCMS;

Sec. 12 SW1/4;

Sec. 13 NW1/4

Sec. 14 N1/2.

CO-18 BLM Stipulation to protect raptor nesting and fledgling habitat.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat.

CO-23 BLM Stipulation to protect bald eagle winter roost sites.

For the following lands:

T. 31 S., R. 58 W., 6TH PM

Sec. 1 LOTS 1;

Sec. 1 SW1/4;

Sec. 2 SWNE,SE EXCL PCMS;

Sec. 9 SWSE EXCL PCMS;

Sec. 10 S2NE,N2SE,SESE EXCL PCMS;

Sec. 11 NWNE,NENW,NESW;

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

EOI# CO00017095

PARCEL ID: 0261 Split Estate

CO, Royal Gorge Field Office, Private, PD

T. 31 S., R. 58 W., 6TH PM

Sec. 17 SE1/4NE1/4,SW1/4NW1/4,SW1/4,N1/2SE1/4;

Sec. 18 SE1/4NE1/4,E1/2SE1/4;

Sec. 19 E1/2E1/2;

Sec. 20 SW1/4NE1/4,W1/2,W1/2SE1/4,SE1/4SE1/4.

Las Animas County

1080 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.
CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.
CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.
CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.
CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.
CO-39 BLM Stipulation to protect cultural resources.
CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

EOI# CO00017095

PARCEL ID: 0265 Split Estate
CO, Royal Gorge Field Office, Private, PD

T. 31 S., R. 58 W., 6TH PM
Sec. 22 E1/2,SE1/4NW1/4,S1/2SW1/4;
Sec. 25 W1/2NE1/4,W1/2,SE1/4;
Sec. 27 N1/2,N1/2SW1/4,SE1/4;
Sec. 34 NE1/4,N1/2NW1/4,N1/2SE1/4,SE1/4SE1/4.

Las Animas County
1920 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.
CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.
CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.
CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.
CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.
CO-39 BLM Stipulation to protect cultural resources.
CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

EOI# CO00017095

PARCEL ID: 0268 Split Estate
CO, Royal Gorge Field Office, Private, PD

T. 31 S., R. 58 W., 6TH PM

Sec. 28 E1/2SW1/4,SW1/4SE1/4;
Sec. 29 N1/2,SW1/4,N1/2SE1/4;
Sec. 30 LOTS 1-4;
Sec. 30 E1/2E1/2;
Sec. 31 LOTS 2,3;
Sec. 31 NE1/4SE1/4,SW1/4SE1/4;
Sec. 32 NW1/4NW1/4,N1/2SW1/4;
Sec. 33 W1/2NE1/4,W1/2,SE1/4.

Las Animas County
1922.78 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-23 BLM Stipulation to protect bald eagle winter roost sites.

For the following lands:

T. 31 S., R. 58 W., 6TH PM

Sec. 28 E1/2SW1/4;

Sec. 29 N1/2,N1/2SE1/4;

Sec. 33 W1/2.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

EOI# CO00017095

PARCEL ID: 6202 Split Estate

CO, Royal Gorge Field Office, Private, PD

Private: BUREAU OF LAND MANAGEMENT

T. 32 S., R. 58 W., 6TH PM

Sec. 3 LOTS 3;

Sec. 4 LOTS 1,4;

Sec. 4 S1/2NW1/4;

Sec. 5 LOTS 1-4;

Sec. 5 SE1/4NE1/4,S1/2NW1/4,N1/2SW1/4,SE1/4SW1/4,NE1/4SE1/4;

Sec. 6 LOTS 1;

Sec. 6 S1/2NE1/4,NE1/4SW1/4,N1/2SE1/4,SW1/4SE1/4;

Sec. 7 LOTS 1-4;

Sec. 7 W1/2NE1/4,E1/2W1/2;

Sec. 9 E1/2NW1/4,SW1/4;

Sec. 18 LOTS 1-4;
Sec. 18 NE1/4NW1/4.

Las Animas County
1650.33 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-23 BLM Stipulation to protect bald eagle winter roost sites.

For the following lands:

T. 32 S., R. 58 W., 6TH PM

Sec. 4 LOTS 4;

Sec. 5 LOTS 1-4;

Sec. 5 SE1/4NE1/4,S1/2NW1/4,N1/2SW1/4;

Sec. 6 S1/2NE1/4,N1/2SE1/4,SW1/4SE1/4;

Sec. 7 LOTS 1-3;

Sec. 7 W1/2NE1/4,E1/2W1/2;

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

EOI# CO00017094

PARCEL ID: 6205 Split Estate

CO, Royal Gorge Field Office, Private, PD

T. 32 S., R. 58 W., 6TH PM

Sec. 31 LOTS 1-4;

Sec. 32 E1/2E1/2;

Sec. 34 S1/2SW1/4;

Sec. 35 N1/2NW1/4.

Las Animas County
410.4 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

EOI# CO00017094

PARCEL ID: 6201 Split Estate

CO, Royal Gorge Field Office, Private, PD

T. 31 S., R. 59 W., 6TH PM

Sec. 7 SWNE,SENE,E2SE EXCL PCMS;

Sec. 7 LOT 1,2 EXCL PCMS;

Sec. 8 S2SW,SWSE EXCL PCMS;

Sec. 17 W2NE,NW,NESW,S2S2 EXCL PCMS;

Sec. 18 SE1/4;

Sec. 19 NE1/4;

Sec. 20 N1/2NE1/4,W1/2NW1/4;

Sec. 21 NE1/4,N1/2NW1/4,SE1/4NW1/4,W1/2SE1/4;

Sec. 28 W1/2NE1/4.

Las Animas County

1517.04 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

EOI# CO00017086

PARCEL ID: 0253 Split Estate

CO, Royal Gorge Field Office, Private, PD

T. 31 S., R. 59 W., 6TH PM

Sec. 13 NE1/4SW1/4,S1/2S1/2,NW1/4SE1/4;

Sec. 14 SW1/4SW1/4,SE1/4SE1/4;

Sec. 15 S2SE EXCL PCMS;
Sec. 22 E1/2;
Sec. 23 NE1/4,S1/2NW1/4,S1/2;
Sec. 24 N1/2,SW1/4,W1/2SE1/4.

Las Animas County
1833.12 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

EOI# CO00017086

PARCEL ID: 0259 Split Estate
CO, Royal Gorge Field Office, Private, PD

T. 31 S., R. 59 W., 6TH PM

Sec. 20 S1/2SE1/4;
Sec. 28 W1/2NW1/4;
Sec. 29 NE1/4,S1/2SW1/4,NW1/4SE1/4;
Sec. 30 S1/2SE1/4;
Sec. 31 LOTS 2-4;
Sec. 31 E1/2,SE1/4NW1/4,E1/2SW1/4;
Sec. 32 N1/2,SW1/4,W1/2SE1/4;
Sec. 33 W1/2NW1/4,SE1/4NW1/4,NW1/4SE1/4.

Las Animas County
1795.34 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

EOI# CO00017086

PARCEL ID: 0267 Split Estate

CO, Royal Gorge Field Office, Private, PD

T. 31 S., R. 59 W., 6TH PM

Sec. 25 S1/2;

Sec. 27 E1/2;

Sec. 34 N1/2N1/2,SW1/4NE1/4,S1/2SW1/4,SE1/4SE1/4;

Sec. 35 NW1/4NE1/4,N1/2NW1/4,S1/2S1/2.

Las Animas County

1240 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

EOI# CO00017086

PARCEL ID: 0248 Split Estate

CO, Royal Gorge Field Office, Bureau of Land Management, PD, Private

T. 32 S., R. 59 W., 6TH PM

Sec. 1 LOTS 1,2;

Sec. 1 S1/2NE1/4,SE1/4SW1/4,SE1/4;

Sec. 2 LOTS 1-4;

Sec. 2 S1/2N1/2,S1/2;

Sec. 11 NW1/4,E1/2SE1/4;

Sec. 12 E1/2,E1/2NW1/4,SW1/4;

Sec. 13 NE1/4NW1/4,SW1/4;

Sec. 14 E1/2NE1/4,SW1/4.

Las Animas County

2308.92 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-23 BLM Stipulation to protect bald eagle winter roost sites

For the following lands:

T. 32 S., R. 59 W., 6TH PM

Sec. 11 E1/2SE1/4;

Sec. 12 E1/2,E1/2NW1/4,SW1/4;

Sec. 13 NE1/4NW1/4;

Sec. 14 E1/2NE1/4,SW1/4.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

EOI# CO00017087

PARCEL ID: 0251 Split Estate

CO, Royal Gorge Field Office, Bureau of Land Management, PD, Private

T. 32 S., R. 59 W., 6TH PM

Sec. 3 LOTS 1-4;

Sec. 3 S1/2N1/2,E1/2SW1/4,SE1/4;

Sec. 4 LOTS 1;

Sec. 4 SE1/4NW1/4,NE1/4SW1/4,S1/2SW1/4;

Sec. 9 ALL;

Sec. 10 NE1/4,W1/2;

Sec. 15 W1/2NE1/4,NW1/4,N1/2SW1/4,SE1/4.

Las Animas County

2405.97 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-23 BLM Stipulation to protect bald eagle winter roost sites

For the following lands:

T. 32 S., R. 59 W., 6TH PM

Sec. 15 N1/2SW1/4,SE1/4.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

EOI# CO00017087

PARCEL ID: 0255 Split Estate

CO, Royal Gorge Field Office, Private, PD

T. 32 S., R. 59 W., 6TH PM

Sec. 5 LOTS 2-4;

Sec. 5 SW1/4NE1/4,S1/2NW1/4,S1/2;

Sec. 6 LOTS 3-7;

Sec. 6 SE1/4NW1/4,E1/2SW1/4,E1/2SE1/4;

Sec. 7 LOTS 1-3;

Sec. 7 S1/2NE1/4,E1/2NW1/4,NE1/4SE1/4;

Sec. 8 SW1/4NW1/4,NW1/4SW1/4.

Las Animas County

1389.78 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

EOI# CO00017087

PARCEL ID: 0269 Split Estate

CO, Royal Gorge Field Office, Bureau of Land Management, PD

T. 32 S., R. 59 W., 6TH PM

Sec. 17 ALL;

Sec. 18 LOTS 1-4;

Sec. 18 E1/2,E1/2W1/2;
Sec. 19 LOTS 1,2;
Sec. 19 SW1/4NE1/4,SE1/4NW1/4,NE1/4SW1/4,NW1/4SE1/4.

Las Animas County
1526.29 Acres

CO-03 BLM Stipulation to protect raptor nests within a one-eighth mile radius from the site.

CO-18 BLM Stipulation to protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

CO-19 BLM Stipulation to protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

CO-28 BLM Stipulation to protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

EOI# CO00017087

PARCEL ID: 5985 Split Estate

CO, Kremmling Field Office, PVT:BUREAU OF LAND MANAGEMENT, PD

T. 8 N., R. 78 W., 6TH PM

Sec. 11 E1/2SE1/4.

Jackson County
80 Acres

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

GRSG-TL-46e BLM Stipulation to prohibit activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood-rearing (March 1 to July 15).

KFO-CSU-04 BLM Stipulation to minimize the risk of sedimentation, spills, and other contaminants, reaching intermittent and/or ephemeral streams in order to protect water quality, stream function, and aquatic habitat.

KFO-CSU-14 BLM Stipulation to protect Paleontological (Fossil) Resources.

KFO-CSU-16 BLM Stipulation to restrict surface occupancy within viewsheds of designated back country, Scenic and Historic Byways, at foreground and middleground distances (within 5 miles), unless topographically screened from view.

KFO-CSU-17 BLM Stipulation to restrict the siting of oil and gas development and operations from all locations and all VRM objective classes at locations where they will otherwise be sky-lined above the horizon, as viewed from all State and U.S. Highways.

KFO-CSU-18 BLM Stipulation to rehabilitate all post-exploration and development within the

foreground distance zone viewshed of all State, U.S., and Interstate Highways in order to replicate the original landscape contour and vegetation.

KFO-CSU-20 BLM Stipulation to protect scenic integrity of Colorado's State and National Parks and their social and economic significance to nearby communities, and to Colorado's Statewide economy.

KFO-LN-01 BLM Stipulation for the purpose of advising the lessee to Avoid or minimize disruption of migratory bird nesting activity by siting or prioritizing vegetation clearing, facility construction, and concentrated operational activities (such as drilling, completion, utility installation) in order to avoid the involvement of higher value migratory bird habitats, especially during the core migratory bird nesting season (from May 15 to July 15).

KFO-LN-05 BLM Stipulation for the purpose of notifying the lessee that Class III Cultural Resource Inventory may be required prior to surface-disturbing activities.

KFO-NSO-05 BLM Stipulation to maintain and protect water quality, stream stability, aquatic health, seasonal use, and downstream fisheries; and sediment processes downstream.

KFO-NSO-19 BLM Stipulation to protect high value wildlife habitat and recreation values Resources associated with designated SWAs.

KFO-TL-02 BLM Stipulation to reduce behavioral disruption during parturition and early young rearing period.

EOI #CO00015215

PARCEL ID: 0034

CO, Little Snake Field Office, BLM, PD

T. 11 N., R. 96 W., 6TH PM

Sec. 6 LOTS 1-7;

Sec. 6 S1/2NE1/4,SE1/4NW1/4,E1/2SW1/4,SE1/4;

Sec. 7 LOTS 1-4;

Sec. 7 E1/2,E1/2W1/2.

Moffat County

1245.47 Acres

CO-29 BLM Stipulation to alert lessee of a paleontological area inventory requirement.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

GRSG-TL-46e BLM Stipulation to prohibit activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood-rearing (March 1 to July 15).

LS-CSU-107 BLM Stipulation to protect medium priority sagebrush habitat.

LS-CSU-111 BLM Stipulation to protect steep slopes.

For the following lands:

T. 11 N., R. 96 W., 6TH PM,

Sec. 6 LOTS 2-5, S1/2NE1/4,SE1/4NW1/4,E1/2SW1/4,SE1/4;

Sec. 7 LOTS 2,3, N1/2NE1/4,E1/2NW1/4,NE1/4SW1/4;

LS-CSU-129 BLM Stipulation to protect white-tailed prairie dog colonies.

LS-CSU-130 BLM Stipulation to control surface use for potential special status plant and wildlife species.

LS-NSO-105 BLM Stipulation to protect perennial water sources.

For the following lands:

T. 11 N., R. 96 W., 6TH PM,
Sec. 6 LOTS 1-4, S1/2NE1/4,SE1/4NW1/4,N1/2SE1/4;
LS-NSO-106 BLM Stipulation to protect raptor nest sites.

For the following lands:

T. 11 N., R. 96 W., 6TH PM,
Sec. 6 LOTS 1, SE1/4NE1/4;
LS-TL-103 BLM Stipulation to protect raptor nesting activities.

For the following lands:

T. 11 N., R. 96 W., 6TH PM,
Sec. 6 LOTS 1, SE1/4NE1/4;
LS-TL-114 BLM Stipulation to protect white-tailed prairie dogs.
LS-TL-143 BLM Stipulation to protect ferruginous hawk nesting activities.

For the following lands:

T. 11 N., R. 96 W., 6TH PM,
Sec. 6 LOTS 1-7, S1/2NE1/4,SE1/4NW1/4,E1/2SW1/4,SE1/4;
Sec. 7 N1/2NE1/4;

EOI #CO00015697

PARCEL ID: 0152

CO, Little Snake Field Office, BLM, PD

T. 10 N., R. 98 W., 6TH PM

Sec. 1 LOTS 5-8;
Sec. 1 S1/2N1/2,S1/2.

Moffat County

640.8 Acres

CO-29 BLM Stipulation to alert lessee of a paleontological area inventory requirement.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

GRSG-NSO-46e(1) BLM Stipulation to protect Greater sage-grouse Priority Habitat Management Areas (PHMA).

For the following lands:

T. 10 N., R. 98 W., 6TH PM,
Sec. 1 LOTS 6-8, SW1/4NE1/4,S1/2NW1/4,SW1/4,W1/2SE1/4;

GRSG-NSO-46e(2) BLM Stipulation to prohibit surface occupancy within 2 miles of active Greater sage-grouse leks in General Habitat Management Areas (GHMA).

For the following lands:

T. 10 N., R. 98 W., 6TH PM,
Sec. 1 LOTS 5-7, S1/2N1/2,SW1/4,N1/2SE1/4,SW1/4SE1/4;

GRSG-TL-46e BLM Stipulation to prohibit activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood-rearing (March 1 to July 15).

GRSG-LN-46e BLM Stipulation to protect PHMA by limiting surface disturbance to 3 percent and limiting density of infrastructure to 1 per 640 acres in PHMA.

For the following lands:

T. 10 N., R. 98 W., 6TH PM,

Sec. 1 LOTS 6-8, SW1/4NE1/4,S1/2NW1/4,SW1/4,W1/2SE1/4;

LS-CSU-107 BLM Stipulation to protect medium priority sagebrush habitat.

LS-CSU-111 BLM Stipulation to protect steep slopes.

For the following lands:

T. 10 N., R. 98 W., 6TH PM,

Sec. 1 LOTS 5-7, S1/2N1/2,N1/2S1/2,SW1/4SW1/4,S1/2SE1/4;

LS-CSU-129 BLM Stipulation to protect white-tailed prairie dog colonies.

LS-CSU-130 BLM Stipulation to control surface use for potential special status plant and wildlife species.

LS-TL-114 BLM Stipulation to protect white-tailed prairie dogs.

LS-TL-115 BLM Stipulation to protect Elk calving areas.

For the following lands:

T. 10 N., R. 98 W., 6TH PM,

Sec. 1 LOTS 5-8, S1/2N1/2;

LS-TL-143 BLM Stipulation to protect ferruginous hawk nesting activities.

LS-TL-148 BLM Stipulation to protect wild horse, sand wash HMA

EOI #CO00016722

PARCEL ID: 0153

CO, Little Snake Field Office, BLM, PD

T. 10 N., R. 98 W., 6TH PM

Sec. 2 LOTS 8;

Sec. 2 S1/2N1/2,S1/2;

Sec. 3 LOTS 5-8;

Sec. 3 S1/2N1/2,S1/2;

Sec. 4 LOTS 5-8;

Sec. 4 S1/2N1/2,S1/2;

Sec. 5 LOTS 5-8;

Sec. 5 S1/2N1/2,S1/2.

Moffat County

2437.75 Acres

CO-29 BLM Stipulation to alert lessee of a paleontological area inventory requirement.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

GRSG-NSO-46e(1) BLM Stipulation to protect Greater sage-grouse PHMA.

GRSG-NSO-46e(2) BLM Stipulation to prohibit surface occupancy within 2 miles of active Greater sage-grouse leks in GHMA.

For the following lands:

T. 10 N., R. 98 W., 6TH PM,

Sec. 2 LOTS 8, S1/2N1/2,N1/2S1/2,S1/2SE1/4;

Sec. 3 LOTS 5, S1/2NE1/4,N1/2SE1/4,SE1/4SE1/4;

GRSG-TL-46e BLM Stipulation to prohibit activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood-rearing (March 1 to July 15).

GRSG-LN-46e BLM Stipulation to protect PHMA by limiting surface disturbance to 3 percent and limiting density of infrastructure to 1 per 640 acres in PHMA.

LS-CSU-107 BLM Stipulation to protect medium priority sagebrush habitat.

LS-CSU-111 BLM Stipulation to protect steep slopes.

For the following lands:

T. 10 N., R. 98 W., 6TH PM,

Sec. 2 S1/2N1/2,N1/2SW1/4;

Sec. 3 S1/2NE1/4,E1/2SE1/4;

LS-CSU-130 BLM Stipulation to control surface use for potential special status plant and wildlife species.

LS-NSO-09 BLM Stipulation to protect wild horse water sources.

For the following lands:

T. 10 N., R. 98 W., 6TH PM,

Sec. 2 LOTS 8, S1/2NW1/4,SW1/4,SW1/4SE1/4;

Sec. 3 LOTS 5-8, S1/2N1/2,S1/2;

Sec. 4 LOTS 5-8, S1/2N1/2,S1/2;

Sec. 5 LOTS 5-8, S1/2N1/2,S1/2;

LS-NSO-105 BLM Stipulation to protect perennial water sources.

For the following lands:

T. 10 N., R. 98 W., 6TH PM,

Sec. 2 LOTS 8, SW1/4SW1/4;

Sec. 3 LOTS 5-8, S1/2SE1/4;

Sec. 5 LOTS 5,6, SE1/4SE1/4;

LS-NSO-106 BLM Stipulation to protect raptor nest sites.

For the following lands:

T. 10 N., R. 98 W., 6TH PM,

Sec. 2 S1/2N1/2,S1/2;

Sec. 3 SE1/4SW1/4,S1/2SE1/4;

Sec. 4 S1/2SW1/4;

Sec. 5 SE1/4SE1/4;

LS-TL-115 BLM Stipulation to protect Elk calving areas.

For the following lands:

T. 10 N., R. 98 W., 6TH PM,

Sec. 2 LOTS 8, S1/2NW1/4,S1/2NE1/4;

Sec. 3 LOTS 5-8, S1/2N1/2,S1/2;

Sec. 4 LOTS 5-8, S1/2N1/2;

Sec. 5 LOTS 5;

LS-TL-143 BLM Stipulation to protect ferruginous hawk nesting activities.

For the following lands:

T. 10 N., R. 98 W., 6TH PM,

Sec. 2 LOTS 8, S1/2N1/2,S1/2;

Sec. 3 LOTS 5-8, S1/2N1/2,S1/2;

LS-TL-148 BLM Stipulation to protect wild horse, sand wash HMA.

EOI #CO00016723

PARCEL ID: 0154

CO, Little Snake Field Office, BLM, PD

T. 10 N., R. 98 W., 6TH PM

Sec. 9 ALL;

Sec. 10 ALL;

Sec. 11 ALL;

Sec. 12 ALL.

Moffat County

2560 Acres

CO-29 BLM Stipulation to alert lessee of a paleontological area inventory requirement.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

GRSG-NSO-46e(1) BLM Stipulation to protect Greater sage-grouse PHMA.

GRSG-TL-46e BLM Stipulation to prohibit activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood-rearing (March 1 to July 15).

GRSG-LN-46e BLM Stipulation to protect PHMA by limiting surface disturbance to 3 percent and limiting density of infrastructure to 1 per 640 acres in PHMA.

LS-CSU-107 BLM Stipulation to protect medium priority sagebrush habitat.

LS-CSU-111 BLM Stipulation to protect steep slopes.

For the following lands:

T. 10 N., R. 98 W., 6TH PM,

Sec. 9 NE1/4SE1/4;

Sec. 10 SE1/4NE1/4,SW1/4SW1/4;

Sec. 11 NE1/4NE1/4,NW1/4SW1/4,SE1/4SE1/4;

Sec. 12 E1/2NE1/4,NE1/4NW1/4,NE1/4SW1/4,SW1/4SW1/4;

LS-CSU-129 BLM Stipulation to protect white-tailed prairie dog colonies.

LS-CSU-130 BLM Stipulation to control surface use for potential special status plant and wildlife species.

LS-NSO-09 BLM Stipulation to protect wild horse water sources.

For the following lands:

T. 10 N., R. 98 W., 6TH PM,

Sec. 9 ALL;

Sec. 10 ALL;

Sec. 11 W1/2NE1/4,W1/2,NW1/4SE1/4;

LS-NSO-105 BLM Stipulation to protect perennial water sources.

For the following lands:

T. 10 N., R. 98 W., 6TH PM,

Sec. 9 W1/2W1/2;

Sec. 10 NE1/4;

Sec. 11 W1/2NW1/4;

Sec. 12 SE1/4SE1/4;

LS-NSO-106 BLM Stipulation to protect raptor nest sites.

For the following lands:

T. 10 N., R. 98 W., 6TH PM,

Sec. 9 NW1/4;

Sec. 10 NE1/4,E1/2NW1/4;

Sec. 12 E1/2SE1/4;

LS-TL-114 BLM Stipulation to protect white-tailed prairie dogs.

LS-TL-143 BLM Stipulation to protect ferruginous hawk nesting activities.

LS-TL-148 BLM Stipulation to protect wild horse, sand wash HMA.

EOI #CO00016723

PARCEL ID: 0186

CO, Little Snake Field Office, BLM, PD

T. 10 N., R. 98 W., 6TH PM

Sec. 28 W1/2W1/2,SE1/4SW1/4,SW1/4SE1/4;

Sec. 29 ALL.

Moffat County

880 Acres

CO-29 BLM Stipulation to alert lessee of a paleontological area inventory requirement.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

GRSG-NSO-46e(1) BLM Stipulation to protect Greater sage-grouse PHMA.

GRSG-NSO-46e(2) BLM Stipulation to prohibit surface occupancy within 2 miles of active Greater sage-grouse leks in GHMA.

For the following lands:

T. 10 N., R. 98 W., 6TH PM,

Sec. 28 W1/2W1/2,SE1/4SW1/4,SW1/4SE1/4;

Sec. 29 N1/2,W1/2SW1/4,SE1/4;

GRSG-TL-46e BLM Stipulation to prohibit activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood-rearing (March 1 to July 15).

GRSG-LN-46e BLM Stipulation to protect PHMA by limiting surface disturbance to 3 percent and limiting density of infrastructure to 1 per 640 acres in PHMA.

LS-CSU-107 BLM Stipulation to protect medium priority sagebrush habitat.

LS-CSU-111 BLM Stipulation to protect steep slopes.

For the following lands:

T. 10 N., R. 98 W., 6TH PM,

Sec. 28 W1/2W1/2,SE1/4SW1/4,SW1/4SE1/4;

Sec. 29 NE1/4NE1/4,NW1/4NW1/4,SE1/4NW1/4,SW1/4SW1/4,NE1/4SE1/4,S1/2SE1/4;

LS-CSU-129 BLM Stipulation to protect white-tailed prairie dog colonies.

LS-CSU-131 BLM Stipulation to protect active white-tailed prairie dog colonies with the black-footed ferret reintroduction area.

LS-NSO-09 BLM Stipulation to protect wild horse water sources.

LS-NSO-105 BLM Stipulation to protect perennial water sources.

For the following lands:

T. 10 N., R. 98 W., 6TH PM,

Sec. 29 S1/2NE1/4,SE1/4NW1/4,E1/2SW1/4,SE1/4;

LS-TL-114 BLM Stipulation to protect white-tailed prairie dogs.

LS-TL-148 BLM Stipulation to protect wild horse, sand wash HMA.

EOI #CO00016723

PARCEL ID: 0187

CO, Little Snake Field Office, BLM, PD

T. 10 N., R. 98 W., 6TH PM

Sec. 30 LOTS 5-8;

Sec. 30 E1/2,E1/2W1/2;

Sec. 31 LOTS 5-8;

Sec. 31 NE1/4,E1/2W1/2,N1/2SE1/4,SW1/4SE1/4.

Moffat County

1233.08 Acres

CO-29 BLM Stipulation to alert lessee of a paleontological area inventory requirement.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

GRSG-NSO-46e(1) BLM Stipulation to protect Greater sage-grouse PHMA.

T. 10 N., R. 98 W., 6TH PM,

Sec. 30 LOTS 5,8, N1/2NE1/4,SE1/4NE1/4,E1/2NW1/4,SE1/4SW1/4,SE1/4;

Sec. 31 LOTS 5-8, NE1/4,E1/2W1/2,N1/2SE1/4,SW1/4SE1/4;

GRSG-NSO-46e(2) BLM Stipulation to prohibit surface occupancy within 2 miles of active Greater sage-grouse leks in GHMA.

For the following lands:

T. 10 N., R. 98 W., 6TH PM,

Sec. 30 SE1/4NE1/4,SE1/4SW1/4,SE1/4;

Sec. 31 LOTS 5,6, E1/2NE1/4,E1/2NW1/4;

GRSG-TL-46e BLM Stipulation to prohibit activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood-rearing (March 1 to July 15).

GRSG-LN-46e BLM Stipulation to protect PHMA by limiting surface disturbance to 3 percent and limiting density of infrastructure to 1 per 640 acres in PHMA.

For the following lands:

T. 10 N., R. 98 W., 6TH PM,

Sec. 30 LOTS 5,8, N1/2NE1/4,SE1/4NE1/4,W1/2NW1/4,SE1/4SW1/4,SE1/4;

Sec. 31 LOTS 5-8, NE1/4,E1/2W1/2,N1/2SE1/4,SW1/4SE1/4;

LS-CSU-111 BLM Stipulation to protect steep slopes.

For the following lands:

T. 10 N., R. 98 W., 6TH PM,

Sec. 30 LOTS 5-8;

Sec. 30 W1/2NE1/4,SE1/4NE1/4,E1/2NW1/4,E1/2SW1/4,N1/2SE1/4,SW1/4SE1/4;

Sec. 31 W1/2NE1/4,SE1/4NW1/4;

LS-NSO-09 BLM Stipulation to protect wild horse water sources.

For the following lands:

T. 10 N., R. 98 W., 6TH PM,

Sec. 30 LOTS 5-8, E1/2,E1/2W1/2;

Sec. 31 LOTS 5-7, NE1/4,E1/2NW1/4,NE1/4SW1/4,NW1/4SE1/4;

LS-NSO-105 BLM Stipulation to protect perennial water sources.

For the following lands:

T. 10 N., R. 98 W., 6TH PM,

Sec. 30 LOTS 7,8, NE1/4,E1/2NW1/4,E1/2SW1/4,W1/2SE1/4;

Sec. 31 LOTS 5, NW1/4NE1/4,NE1/4NW1/4;

LS-TL-148 BLM Stipulation to protect wild horse, sand wash HMA.

EOI #CO00016723

PARCEL ID: 0185

CO, Little Snake Field Office, BLM, PD

T. 10 N., R. 98 W., 6TH PM

Sec. 32 NW1/4NE1/4,N1/2NW1/4,SW1/4NW1/4.

Moffat County

160 Acres

CO-29 BLM Stipulation to alert lessee of a paleontological area inventory requirement.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

GRSG-NSO-46e(1) BLM Stipulation to protect Greater sage-grouse PHMA.

GRSG-NSO-46e(2) BLM Stipulation to prohibit surface occupancy within 2 miles of active Greater sage-grouse leks in GHMA.

For the following lands:

T. 10 N., R. 98 W., 6TH PM,

Sec. 32 NW1/4NE1/4,W1/2NW1/4;

GRSG-TL-46e BLM Stipulation to prohibit activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood-rearing (March 1 to July 15).

GRSG-LN-46e BLM Stipulation to protect PHMA by limiting surface disturbance to 3 percent and limiting density of infrastructure to 1 per 640 acres in PHMA.

LS-CSU-107 BLM Stipulation to protect medium priority sagebrush habitat.

LS-CSU-111 BLM Stipulation to protect steep slopes.

LS-CSU-129 BLM Stipulation to protect white-tailed prairie dog colonies.

LS-CSU-130 BLM Stipulation to control surface use for potential special status plant and wildlife species.

LS-NSO-09 BLM Stipulation to protect wild horse water sources.

LS-TL-114 BLM Stipulation to protect white-tailed prairie dogs.

LS-TL-148 BLM Stipulation to protect wild horse, sand wash HMA.

EOI #CO00016723

PARCEL ID: 6176

CO, Little Snake Field Office, BLM, PD

T. 11 N., R. 98 W., 6TH PM

Sec. 2 LOTS 5-8;

Sec. 2 S1/2N1/2,S1/2;

Sec. 3 LOTS 5-8;

Sec. 3 S1/2NE1/4,SE1/4NW1/4,E1/2SW1/4,SE1/4;

Sec. 10 NE1/4;

Sec. 11 N1/2.

Moffat County

1647.2 Acres

CO-29 BLM Stipulation to alert lessee of a paleontological area inventory requirement.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

GRSG-NSO-46e(1) BLM Stipulation to protect Greater sage-grouse PHMA.

For the following lands:

T. 11 N., R. 98 W., 6TH PM,

Sec. 2 LOTS 6-8, S1/2N1/2, S1/2;

Sec. 3 LOTS 5-8, S1/2NE1/4,SE1/4NW1/4,E1/2SW1/4,SE1/4;

Sec. 10 NE1/4;

Sec. 11 N1/2;

GRSG-NSO-46e(2) BLM Stipulation to prohibit surface occupancy within 2 miles of active Greater sage-grouse leks in GHMA.

For the following lands:

T. 11 N., R. 98 W., 6TH PM,

Sec. 2 LOTS 8, SW1/4NW1/4,N1/2SW1/4,NE1/4SE1/4;

Sec. 3 LOTS 5, S1/2NE1/4,SE1/4SW1/4,SE1/4;

Sec. 10 NW1/4NE1/4;

GRSG-TL-46e BLM Stipulation to prohibit activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood-rearing (March 1 to July 15).

GRSG-LN-46e BLM Stipulation to protect PHMA by limiting surface disturbance to 3 percent and limiting density of infrastructure to 1 per 640 acres in PHMA.

For the following lands:

T. 11 N., R. 98 W., 6TH PM,

Sec. 2 LOTS 6-8, S1/2N1/2, S1/2;

Sec. 3 LOTS 5-8, S1/2NE1/4,SE1/4NW1/4,E1/2SW1/4,SE1/4;

Sec. 10 NE1/4;

Sec. 11 N1/2;

LS-CSU-107 BLM Stipulation to protect medium priority sagebrush habitat.

LS-CSU-111 BLM Stipulation to protect steep slopes.

For the following lands:

T. 11 N., R. 98 W., 6TH PM,

Sec. 2 LOTS 5-8, S1/2N1/2,N1/2SW1/4,SW1/4SW1/4,E1/2SE1/4;

Sec. 3 SE1/4NE1/4,E1/2SW1/4,SE1/4;

Sec. 10 NW1/4NE1/4;

Sec. 11 NE1/4,SW1/4NW1/4;

LS-CSU-130 BLM Stipulation to control surface use for potential special status plant and wildlife species.

LS-NSO-105 BLM Stipulation to protect perennial water sources.

For the following lands:

T. 11 N., R. 98 W., 6TH PM,

Sec. 3 LOTS 8, SE1/4SW1/4,SW1/4SE1/4;

Sec. 10 W1/2NE1/4;

LS-NSO-106 BLM Stipulation to protect raptor nest sites.

For the following lands:

T. 11 N., R. 98 W., 6TH PM,

Sec. 2 SE1/4NE1/4,NE1/4SE1/4;

LS-TL-143 BLM Stipulation to protect ferruginous hawk nesting activities.

For the following lands:

T. 11 N., R. 98 W., 6TH PM,

Sec. 2 LOTS 5-8, S1/2N1/2, S1/2;

EOI #CO00016726

PARCEL ID: 6177

CO, Little Snake Field Office, BLM, PD

T. 11 N., R. 98 W., 6TH PM

Sec. 6 LOTS 8-14;

Sec. 6 S1/2NE1/4,SE1/4NW1/4,E1/2SW1/4;

Sec. 7 LOTS 5.

Moffat County

513.02 Acres

CO-29 BLM Stipulation to alert lessee of a paleontological area inventory requirement.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

GRSG-NSO-46e(1) BLM Stipulation to protect Greater sage-grouse PHMA.

GRSG-TL-46e BLM Stipulation to prohibit activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood-rearing (March 1 to July 15).

GRSG-LN-46e BLM Stipulation to protect PHMA by limiting surface disturbance to 3 percent and limiting density of infrastructure to 1 per 640 acres in PHMA.

LS-CSU-107 BLM Stipulation to protect medium priority sagebrush habitat.

LS-CSU-111 BLM Stipulation to protect steep slopes.

For the following lands:

T. 11 N., R. 98 W., 6TH PM,

Sec. 6 LOTS 8, SE1/4NE1/4;

Sec. 7 LOTS 5;

LS-CSU-130 BLM Stipulation to control surface use for potential special status plant and wildlife

species.

LS-NSO-105 BLM Stipulation to protect perennial water sources.

LS-NSO-106 BLM Stipulation to protect raptor nest sites.

For the following lands:

T. 11 N., R. 98 W., 6TH PM,

Sec. 6 LOTS 8-10, S1/2NE1/4,SE1/4NW1/4;

LS-TL-143 BLM Stipulation to protect ferruginous hawk nesting activities.

EOI #CO00016726

PARCEL ID: 6179

CO, Little Snake Field Office, BLM, PD

T. 11 N., R. 98 W., 6TH PM

Sec. 20 NE1/4SE1/4,S1/2SE1/4;

Sec. 29 NE1/4,NE1/4NW1/4,S1/2NW1/4,S1/2;

Sec. 32 ALL.

Moffat County

1360 Acres

CO-29 BLM Stipulation to alert lessee of a paleontological area inventory requirement.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

GRSG-NSO-46e(1) BLM Stipulation to protect Greater sage-grouse PHMA.

GRSG-TL-46e BLM Stipulation to prohibit activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood-rearing (March 1 to July 15).

GRSG-LN-46e BLM Stipulation to protect PHMA by limiting surface disturbance to 3 percent and limiting density of infrastructure to 1 per 640 acres in PHMA.

LS-CSU-107 BLM Stipulation to protect medium priority sagebrush habitat.

LS-CSU-111 BLM Stipulation to protect steep slopes.

For the following lands:

T. 11 N., R. 98 W., 6TH PM,

Sec. 20 S1/2SE1/4;

Sec. 29 N1/2NE1/4,SE1/4NE1/4,NE1/4NW1/4,SW1/4,W1/2SE1/4,SE1/4SE1/4;

Sec. 32 SE1/4NE1/4,N1/2NW1/4,S1/2SW1/4,E1/2SE1/4,SW1/4SE1/4;

LS-CSU-130 BLM Stipulation to control surface use for potential special status plant and wildlife species.

LS-NSO-09 BLM Stipulation to protect wild horse water sources.

For the following lands:

T. 11 N., R. 98 W., 6TH PM,

Sec. 29 S1/2S1/2;

Sec. 32 ALL;

LS-NSO-105 BLM Stipulation to protect perennial water sources.

For the following lands:

T. 11 N., R. 98 W., 6TH PM,

Sec. 32 W1/2NE1/4,NW1/4,E1/2SW1/4,NW1/4SW1/4,SE1/4;
LS-TL-115 BLM Stipulation to protect Elk calving areas.
LS-TL-148 BLM Stipulation to protect wild horse, sand wash HMA.

EOI #CO00016726

PARCEL ID: 0171

CO, Little Snake Field Office, BLM, PD

T. 11 N., R. 98 W., 6TH PM

Sec. 21 NE1/4,NE1/4NW1/4,S1/2NW1/4,S1/2;

Sec. 28 ALL;

Sec. 33 ALL.

Moffat County

1880 Acres

CO-29 BLM Stipulation to alert lessee of a paleontological area inventory requirement.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

GRSG-NSO-46e(1) BLM Stipulation to protect Greater sage-grouse PHMA.

GRSG-NSO-46e(2) BLM Stipulation to prohibit surface occupancy within 2 miles of active Greater sage-grouse leks in GHMA.

For the following lands:

T. 11 N., R. 98 W., 6TH PM,

Sec. 21 S1/2NE1/4,N1/2SE1/4,SE1/4SE1/4;

Sec. 28 NE1/4NE1/4,S1/2SE1/4;

Sec. 33 E1/2;

GRSG-TL-46e BLM Stipulation to prohibit activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood-rearing (March 1 to July 15).

GRSG-LN-46e BLM Stipulation to protect PHMA by limiting surface disturbance to 3 percent and limiting density of infrastructure to 1 per 640 acres in PHMA.

LS-CSU-107 BLM Stipulation to protect medium priority sagebrush habitat.

LS-CSU-111 BLM Stipulation to protect steep slopes.

For the following lands:

T. 11 N., R. 98 W., 6TH PM,

Sec. 21 S1/2NE1/4,SE1/4NW1/4,S1/2SW1/4,E1/2SE1/4,NW1/4SE1/4;

Sec. 28 SW1/4NE1/4,NW1/4,NE1/4SW1/4,SW1/4SW1/4,W1/2SE1/4,SE1/4SE1/4;

Sec. 33 E1/2,SW1/4;

LS-CSU-130 BLM Stipulation to control surface use for potential special status plant and wildlife species.

LS-NSO-09 BLM Stipulation to protect wild horse water sources.

For the following lands:

T. 11 N., R. 98 W., 6TH PM,

Sec. 21 E1/2,E1/2W1/2;

Sec. 28 NE1/4,SW1/4SW1/4;

Sec. 33 S1/2NE1/4,W1/2,SE1/4;

LS-NSO-105 BLM Stipulation to protect perennial water sources.

For the following lands:

T. 11 N., R. 98 W., 6TH PM,

Sec. 28 SW1/4NE1/4,S1/2NW1/4,SW1/4,W1/2SE1/4;

LS-TL-115 BLM Stipulation to protect Elk calving areas.

LS-TL-148 BLM Stipulation to protect wild horse, sand wash HMA.

EOI #CO00016726

PARCEL ID: 0172

CO, Little Snake Field Office, BLM, PD

T. 11 N., R. 98 W., 6TH PM

Sec. 24 E1/2NE1/4,SW1/4NE1/4,S1/2.

Moffat County

440 Acres

CO-29 BLM Stipulation to alert lessee of a paleontological area inventory requirement.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

GRSG-NSO-46e(1) BLM Stipulation to protect Greater sage-grouse PHMA.

GRSG-NSO-46e(2) BLM Stipulation to prohibit surface occupancy within 2 miles of active Greater sage-grouse leks in GHMA.

For the following lands:

T. 11 N., R. 98 W., 6TH PM,

Sec. 24 S1/2NE1/4,SW1/4,N1/2SE1/4;

GRSG-TL-46e BLM Stipulation to prohibit activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood-rearing (March 1 to July 15).

GRSG-LN-46e BLM Stipulation to protect PHMA by limiting surface disturbance to 3 percent and limiting density of infrastructure to 1 per 640 acres in PHMA.

LS-CSU-107 BLM Stipulation to protect medium priority sagebrush habitat.

LS-CSU-111 BLM Stipulation to protect steep slopes.

For the following lands:

T. 11 N., R. 98 W., 6TH PM,

Sec. 24 S1/2NE1/4,SW1/4,N1/2SE1/4;

LS-CSU-129 BLM Stipulation to protect white-tailed prairie dog colonies.

LS-CSU-130 BLM Stipulation to control surface use for potential special status plant and wildlife species.

LS-TL-114 BLM Stipulation to protect white-tailed prairie dogs.

For the following lands:

T. 11 N., R. 98 W., 6TH PM,

Sec. 24 S1/2;

LS-TL-115 BLM Stipulation to protect Elk calving areas.

LS-TL-148 BLM Stipulation to protect wild horse, sand wash HMA.

EOI #CO00016726

PARCEL ID: 0175 Split Estate

CO, Little Snake Field Office, BLM, PD

PVT:BUREAU OF LAND MANAGEMENT

T. 11 N., R. 98 W., 6TH PM

Sec. 30 SE1/4SW1/4,SE1/4;

Sec. 31 LOTS 5-8;

Sec. 31 E1/2,E1/2W1/2.

Moffat County

835.92 Acres

CO-29 BLM Stipulation to alert lessee of a paleontological area inventory requirement.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

GRSG-NSO-46e(1) BLM Stipulation to protect Greater sage-grouse PHMA.

For the following lands:

T. 11 N., R. 98 W., 6TH PM,

Sec. 30 SE1/4SW1/4,N1/2SE1/4,SE1/4SE1/4;

Sec. 31 LOTS 7,8, E1/2,E1/2W1/2;

GRSG-TL-46e BLM Stipulation to prohibit activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood-rearing (March 1 to July 15).

GRSG-LN-46e BLM Stipulation to protect PHMA by limiting surface disturbance to 3 percent and limiting density of infrastructure to 1 per 640 acres in PHMA.

For the following lands:

T. 11 N., R. 98 W., 6TH PM,

Sec. 30 SE1/4SW1/4,N1/2SE1/4,SE1/4SE1/4;

Sec. 31 LOTS 7,8, E1/2,E1/2W1/2;

LS-CSU-107 BLM Stipulation to protect medium priority sagebrush habitat.

LS-CSU-111 BLM Stipulation to protect steep slopes.

For the following lands:

T. 11 N., R. 98 W., 6TH PM,

Sec. 30 SE1/4SW1/4,SE1/4;

Sec. 31 LOTS 5-7, E1/2NE1/4;

LS-CSU-130 BLM Stipulation to control surface use for potential special status plant and wildlife species.

LS-NSO-09 BLM Stipulation to protect wild horse water sources.

For the following lands:

T. 11 N., R. 98 W., 6TH PM,

Sec. 31 E1/2E1/2;

LS-TL-115 BLM Stipulation to protect Elk calving areas.

For the following lands:

T. 11 N., R. 98 W., 6TH PM,

Sec. 30 E1/2SE1/4;

LS-TL-148 BLM Stipulation to protect wild horse, sand wash HMA.

EOI #CO00016726

PARCEL ID: 6175

CO, Little Snake Field Office, BLM, PD

T. 12 N., R. 98 W., 6TH PM

Sec. 17 LOTS 1-5;

Sec. 17 S1/2SW1/4,SW1/4SE1/4;

Sec. 18 LOTS 5-9;

Sec. 18 SE1/4SW1/4,S1/2SE1/4;

Sec. 19 LOTS 5-8;

Sec. 19 E1/2,E1/2W1/2;

Sec. 20 NE1/4NW1/4,W1/2W1/2.

Moffat County

1390.66 Acres

CO-29 BLM Stipulation to alert lessee of a paleontological area inventory requirement.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

GRSG-NSO-46e(1) BLM Stipulation to protect Greater sage-grouse PHMA.

GRSG-NSO-46e(2) BLM Stipulation to prohibit surface occupancy within 2 miles of active Greater sage-grouse leks in GHMA.

For the following lands:

T. 12 N., R. 98 W., 6TH PM,

Sec. 17 LOTS 5;

Sec. 19 SE1/4NW1/4,NE1/4SW1/4;

GRSG-TL-46e BLM Stipulation to prohibit activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood-rearing (March 1 to July 15).

GRSG-LN-46e BLM Stipulation to protect PHMA by limiting surface disturbance to 3 percent and limiting density of infrastructure to 1 per 640 acres in PHMA.

LS-CSU-107 BLM Stipulation to protect medium priority sagebrush habitat.

LS-CSU-111 BLM Stipulation to protect steep slopes.

For the following lands:

T. 12 N., R. 98 W., 6TH PM,

Sec. 17 LOTS 2,3, S1/2SW1/4,SW1/4SE1/4;

Sec. 18 LOTS 5-9, SE1/4SW1/4,S1/2SE1/4;

Sec. 19 LOTS 5-8, SW1/4NE1/4,SE1/4NW1/4,E1/2SW1/4,NW1/4SE1/4;

Sec. 20 NW1/4NW1/4,W1/2SW1/4;

LS-CSU-130 BLM Stipulation to control surface use for potential special status plant and wildlife species.

LS-NSO-105 BLM Stipulation to protect perennial water sources.

For the following lands:

T. 12 N., R. 98 W., 6TH PM,

Sec. 18 LOTS 8,9;

Sec. 19 S1/2NE1/4,N1/2SE1/4,SE1/4SE1/4;

Sec. 20 SW1/4NW1/4,W1/2SW1/4;

LS-NSO-106 BLM Stipulation to protect raptor nest sites.

For the following lands:

T. 12 N., R. 98 W., 6TH PM,

Sec. 19 LOTS 8;

LS-TL-143 BLM Stipulation to protect ferruginous hawk nesting activities.

EOI #CO00016729

PARCEL ID: 0165

CO, Little Snake Field Office, BLM, PD

T. 12 N., R. 98 W., 6TH PM

Sec. 26 SW1/4;

Sec. 27 E1/2SW1/4,SW1/4SW1/4,SE1/4;

Sec. 34 ALL;

Sec. 35 W1/2.

Moffat County

1400 Acres

CO-29 BLM Stipulation to alert lessee of a paleontological area inventory requirement.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

GRSG-NSO-46e(1) BLM Stipulation to protect Greater sage-grouse PHMA.

GRSG-NSO-46e(2) BLM Stipulation to prohibit surface occupancy within 2 miles of active Greater sage-grouse leks in GHMA.

For the following lands:

T. 12 N., R. 98 W., 6TH PM,

Sec. 26 W1/2SW1/4;

Sec. 27 SE1/4SE1/4;

Sec. 34 NE1/4NE1/4,S1/2NE1/4;

Sec. 35 NW1/4NW1/4;

GRSG-TL-46e BLM Stipulation to prohibit activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood-rearing (March 1 to July 15).

GRSG-LN-46e BLM Stipulation to protect PHMA by limiting surface disturbance to 3 percent and limiting density of infrastructure to 1 per 640 acres in PHMA.

LS-CSU-107 BLM Stipulation to protect medium priority sagebrush habitat.

LS-CSU-111 BLM Stipulation to protect steep slopes.

For the following lands:

T. 12 N., R. 98 W., 6TH PM,

Sec. 26 NE1/4SW1/4,S1/2SW1/4;

Sec. 34 NE1/4NE1/4,S1/2NE1/4;

Sec. 35 NW1/4NW1/4,SE1/4SW1/4;

LS-CSU-129 BLM Stipulation to protect white-tailed prairie dog colonies.

LS-CSU-130 BLM Stipulation to control surface use for potential special status plant and wildlife species.

LS-NSO-105 BLM Stipulation to protect perennial water sources.

For the following lands:

T. 12 N., R. 98 W., 6TH PM,

Sec. 26 NW1/4SW1/4;

Sec. 27 N1/2SE1/4;

Sec. 34 SW1/4NE1/4,S1/2NW1/4,SW1/4,W1/2SE1/4;

LS-TL-114 BLM Stipulation to protect white-tailed prairie dogs.

EOI #CO00016729

PARCEL ID: 0167

CO, Little Snake Field Office, BLM, PD

T. 12 N., R. 98 W., 6TH PM

Sec. 29 W1/2W1/2,SE1/4SW1/4;

Sec. 30 LOTS 5-8;

Sec. 30 E1/2,E1/2W1/2;

Sec. 31 LOTS 5-8;

Sec. 31 E1/2,E1/2W1/2;

Sec. 32 ALL.

Moffat County

2111.96 Acres

CO-29 BLM Stipulation to alert lessee of a paleontological area inventory requirement.

For the following lands:

T. 12 N., R. 98 W., 6TH PM,

Sec. 29 W1/2W1/2,SE1/4SW1/4;

Sec. 30 E1/2,E1/2W1/2;

Sec. 31 E1/2,E1/2W1/2;

Sec. 32 ALL;

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

GRSG-NSO-46e(1) BLM Stipulation to protect Greater sage-grouse PHMA.

GRSG-NSO-46e(2) BLM Stipulation to prohibit surface occupancy within 2 miles of active Greater sage-grouse leks in GHMA.

For the following lands:

T. 12 N., R. 98 W., 6TH PM,

Sec. 32 E1/2E1/2,SW1/4SE1/4;

GRSG-TL-46e BLM Stipulation to prohibit activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood-rearing (March 1 to July 15).

GRSG-LN-46e BLM Stipulation to protect PHMA by limiting surface disturbance to 3 percent and limiting density of infrastructure to 1 per 640 acres in PHMA.

LS-CSU-107 BLM Stipulation to protect medium priority sagebrush habitat.

LS-CSU-111 BLM Stipulation to protect steep slopes.

For the following lands:

T. 12 N., R. 98 W., 6TH PM,

Sec. 30 LOTS 5, NE1/4NE1/4,NE1/4NW1/4;

Sec. 31 LOTS 8, NW1/4NE1/4,SE1/4SW1/4,NW1/4SE1/4;

Sec. 32 NE1/4,E1/2NW1/4,E1/2SE1/4;

LS-CSU-130 BLM Stipulation to control surface use for potential special status plant and wildlife species.

LS-NSO-105 BLM Stipulation to protect perennial water sources.

For the following lands:

T. 12 N., R. 98 W., 6TH PM,

Sec. 29 SW1/4SW1/4;

Sec. 30 SE1/4SE1/4;

Sec. 31 LOTS 8, NE1/4,SE1/4SW1/4,NE1/4SE1/4,SW1/4SE1/4;

Sec. 32 W1/2NW1/4,NW1/4SW1/4;

LS-NSO-106 BLM Stipulation to protect raptor nest sites.

For the following lands:

T. 12 N., R. 98 W., 6TH PM,

Sec. 30 LOTS 5,6, NE1/4NW1/4;

Sec. 31 E1/2SW1/4,SE1/4;

Sec. 32 S1/2NE1/4,SE1/4SW1/4,N1/2SE1/4,SW1/4SE1/4;

LS-TL-143 BLM Stipulation

to protect ferruginous hawk nesting activities

EOI #CO00016729

PARCEL ID: 6198 Split Estate

CO, Little Snake Field Office, Private: BUREAU OF LAND MANAGEMENT, PD

T. 11 N., R. 88 W., 6TH PM

Sec. 7 LOTS 7,8;

Sec. 7 E1/2SW1/4,NW1/4SE1/4,S1/2SE1/4.

Routt County

301.63 Acres

CO-29 BLM Stipulation to alert lessee of a paleontological area inventory requirement.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

CO-57 BLM Stipulation to protect Wildlife-migration corridors.

GRSG-NSO-46e(1) BLM Stipulation to protect Greater sage-grouse PHMA.

For the following lands:

T. 11 N., R. 88 W., 6TH PM

Sec. 7 NW1/4SE1/4,S1/2SE1/4.

GRSG-TL-46e BLM Stipulation to prohibit activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood-rearing (March 1 to July 15).

For the following lands:

T. 11 N., R. 88 W., 6TH PM

Sec. 7 NW1/4SE1/4,S1/2SE1/4.

GRSG-LN-46e BLM Stipulation to protect PHMA by limiting surface disturbance to 3 percent and limiting density of infrastructure to 1 per 640 acres in PHMA.

For the following lands:

T. 11 N., R. 88 W., 6TH PM

Sec. 7 NW1/4SE1/4,S1/2SE1/4.

LS-NSO-105 BLM Stipulation to protect perennial water sources.

For the following lands:

T. 11 N., R. 88 W., 6TH PM

Sec. 7 E1/2SW1/4,NW1/4SE1/4,S1/2SE1/4

LS-CSU-107 BLM Stipulation to protect medium priority sagebrush habitat.

For the following lands:

T. 11 N., R. 88 W., 6TH PM

Section 7: Lot 7;

Section 7: NESW,NWSE;

LS-CSU-111 BLM Stipulation to protect steep slopes.

LS-CSU-130 BLM Stipulation to control surface use for potential special status plant and wildlife species.

LS-TL-104 BLM Stipulation to protect Columbian sharp-tailed grouse crucial winter range.

For the following lands:

T. 11 N., R. 88 W., 6TH PM

Section 7: NWSE,S2SE;

LS-TL-115 BLM Stipulation to protect Elk calving areas.

For the following lands:

T. 11 N., R. 88 W., 6TH PM

Section 7: Lot 7,8;

Section 7: E2SW,NWSE,S2SE;

LS-TL-136 BLM Stipulation to protect mule deer crucial winter range.

For the following lands:

T. 11 N., R. 88 W., 6TH PM

Section 7: Lot 7,8;

Section 7: E2SW,NWSE,S2SE;

LS-TL-137 BLM Stipulation to protect elk crucial winter range.

For the following lands:

T. 11 N., R. 88 W., 6TH PM

Section 7: Lot 7,8;

Section 7: E2SW,NWSE,S2SE;

EOI# CO00017063

PARCEL ID: 6199 Split Estate

CO, Little Snake Field Office, Private: BUREAU OF LAND MANAGEMENT, PD

T. 11 N., R. 88 W., 6TH PM

Sec. 16 NE1/4SW1/4,SW1/4SW1/4;

Sec. 19 LOTS 5,6,11-17,24-26;

Sec. 19 N1/2NE1/4,NE1/4NW1/4;

Sec. 20 LOTS 1-9;

Sec. 20 E1/2NE1/4,SE1/4SE1/4;

Sec. 21 S1/2NE1/4,SE1/4NW1/4,NE1/4SW1/4,SE1/4;

Sec. 29 LOTS 1-3;
Sec. 29 NE1/4NE1/4,S1/2N1/2.

Routt County
1443.26 Acres

CO-29 BLM Stipulation to alert lessee of a paleontological area inventory requirement.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

GRSG-NSO-46e(1) BLM Stipulation to protect Greater sage-grouse PHMA.

For the following lands:

T. 11 N., R. 88 W., 6TH PM

Sec. 16 NE1/4SW1/4,SW1/4SW1/4;

Sec. 20 LOTS 1,2,5;

Sec. 20 E1/2NE1/4;

GRSG-TL-46e BLM Stipulation to prohibit activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood-rearing (March 1 to July 15).

For the following lands:

T. 11 N., R. 88 W., 6TH PM

Sec. 16 NE1/4SW1/4,SW1/4SW1/4;

Sec. 19 LOTS 5,6,11-17,24-26;

Sec. 19 N1/2NE1/4,NE1/4NW1/4;

Sec. 20 LOTS 1-5,7,8;

Sec. 20 E1/2NE1/4;

Sec. 29 LOTS 1-3;

Sec. 29 SW1/4NE1/4,S1/2NW1/4.

GRSG-LN-46e BLM Stipulation to protect PHMA by limiting surface disturbance to 3 percent and limiting density of infrastructure to 1 per 640 acres in PHMA.

For the following lands:

T. 11 N., R. 88 W., 6TH PM

Sec. 16 NE1/4SW1/4,SW1/4SW1/4;

Sec. 20 LOTS 1,2,5;

Sec. 20 E1/2NE1/4;

LS-NSO-105 BLM Stipulation to protect perennial water sources.

LS-NSO-118 BLM Stipulation to protect Columbian sharp-tailed grouse lek sites.

For the following lands:

T. 11 N., R. 88 W., 6TH PM

Section 16: SWSW;

Section 20: Lot 1,4,7;

Section 20: NENE;

LS-CSU-107 BLM Stipulation to protect medium priority sagebrush habitat.

For the following lands:

T. 11 N., R. 88 W., 6TH PM

Section 16: NESW,SWSW;

Section 20: Lot 1,5;

Section 20: E2NE;

Section 21: S2NE,SE,SENW,NESW,SE;

LS-CSU-111 BLM Stipulation to protect steep slopes.

For the following lands:

T. 11 N., R. 88 W., 6TH PM

Section 16: NESW;

Section 19: Lot 5,6,11-13,16,17,24;

Section 19: N2NE,NENW;

Section 20: Lot 1,4,6,9;

Section 20: NENE,SESE;

Section 21: S2NE,NESW,SE;

Section 29: Lot 1,3;

Section 29: E2NE,SWNW;

LS-CSU-130 BLM Stipulation to control surface use for potential special status plant and wildlife species.

LS-TL-104 BLM Stipulation to protect Columbian sharp-tailed grouse crucial winter range.

LS-TL-112 BLM Stipulation to protect Columbian sharp-tailed grouse nesting habitat.

LS-TL-115 BLM Stipulation to protect Elk calving areas.

EOI# CO00017063

PARCEL ID: 0244 Split Estate

CO, Little Snake Field Office, Bureau of Land Management, PD

Private: BUREAU OF LAND MANAGEMENT

T. 11 N., R. 89 W., 6TH PM

Sec. 3 LOTS 12,13,18,19;

Sec. 11 LOTS 1-16;

Sec. 12 LOTS 1-16.

Moffat County

1412.49 Acres

CO-29 BLM Stipulation to alert lessee of a paleontological area inventory requirement.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

CO-57 BLM Stipulation to protect Wildlife-migration corridors.

GRSG-TL-46e BLM Stipulation to prohibit activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood-rearing (March 1 to July 15).

For the following lands:

T. 11 N., R. 89 W., 6TH PM

Sec. 3 LOTS 12,13,18,19;

Sec. 11 LOTS 2-16;

Sec. 12 LOTS 5,12-14.

LS-NSO-105 BLM Stipulation to protect perennial water sources.

For the following lands:

T. 11 N., R. 89 W., 6TH PM

Sec. 3 LOT 12;

Sec. 11 LOTS 2-4, 5-7,9-16;

Sec. 12 LOTS 3-4;

LS-CSU-107 BLM Stipulation to protect medium priority sagebrush habitat.

For the following lands:

T. 11 N., R. 89 W., 6TH PM

Section 3: Lot 12,13,18,19;

Section 11: Lot 1-5;

Section 12: Lot 1-4;

LS-CSU-111 BLM Stipulation to protect steep slopes.

LS-CSU-130 BLM Stipulation to control surface use for potential special status plant and wildlife species.

LS-TL-104 BLM Stipulation to protect Columbian sharp-tailed grouse crucial winter range.

For the following lands:

T. 11 N., R. 89 W., 6TH PM

Section 3: Lot 12,13,18,19;

Section 11: Lot 1-16;

Section 12: Lot 5,12,13;

LS-TL-115 BLM Stipulation to protect Elk calving areas.

For the following lands:

T. 11 N., R. 89 W., 6TH PM

Section 11: Lot 1,2,7-9;

Section 12: Lot 1-16;

LS-TL-136 BLM Stipulation to protect mule deer crucial winter range.

For the following lands:

T. 11 N., R. 89 W., 6TH PM

Section 3: Lot 12,13,18,19;

Section 11: Lot 1-16;

Section 12: Lot 8-16;

LS-TL-137 BLM Stipulation to protect elk crucial winter range.

For the following lands:

T. 11 N., R. 89 W., 6TH PM

Section 3: Lot 12,13,18,19;

Section 11: Lot 1-16;

Section 12: Lot 5,11-14;

EOI# CO00017063

PARCEL ID: 0238

CO, Little Snake Field Office, Bureau of Land Management, PD

T. 10 N., R. 94 W., 6TH PM

Sec. 7 LOTS 1-4;

Sec. 7 E1/2,E1/2W1/2;

Sec. 17 N1/2;

Sec. 18 LOTS 1,2;

Sec. 18 NE1/4,E1/2NW1/4.

Moffat County
1268.77 Acres

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

GRSG-NSO-46e(1) BLM Stipulation to protect Greater sage-grouse PHMA.

GRSG-TL-46e BLM Stipulation to prohibit activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood-rearing (March 1 to July 15).

GRSG-LN-46e BLM Stipulation to protect PHMA by limiting surface disturbance to 3 percent and limiting density of infrastructure to 1 per 640 acres in PHMA.

LS-NSO-105 BLM Stipulation to protect perennial water sources.

For the following lands:

T. 10 N., R. 94 W., 6TH PM

Sec. 18 SENW,SWNE.

LS-CSU-108 BLM Stipulation to protect high priority sagebrush habitats.

LS-CSU-130 BLM Stipulation to control surface use for potential special status plant and wildlife species.

LS-CSU-111 BLM Stipulation to protect steep slopes.

For the following lands:

T. 10 N., R. 94 W., 6TH PM

Section 7: Lot 4;

EOI# CO00016974

PARCEL ID: 6197 Split Estate

CO, Little Snake Field Office, Private: BUREAU OF LAND MANAGEMENT, PD

T. 10 N., R. 94 W., 6TH PM

Sec. 18 LOTS 3,4;

Sec. 18 E1/2SW1/4,SE1/4.

Moffat County
316.55 Acres

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

GRSG-NSO-46e(1) BLM Stipulation to protect Greater sage-grouse PHMA.

GRSG-TL-46e BLM Stipulation to prohibit activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood-rearing (March 1 to July 15).

GRSG-LN-46e BLM Stipulation to protect PHMA by limiting surface disturbance to 3 percent and limiting density of infrastructure to 1 per 640 acres in PHMA.

LS-NSO-105 BLM Stipulation to protect perennial water sources.

For the following lands:

T. 10 N., R. 94 W., 6TH PM

Sec. 18 LOT 3;

Sec. 18 E1/2SW1/4,W1/2SE1/4,NESE.

LS-CSU-108 BLM Stipulation to protect high priority sagebrush habitats.

LS-CSU-111 BLM Stipulation to protect steep slopes.

For the following lands:

T.0100N., R.0940W., 6TH PM

Section 18: Lot 4;

LS-CSU-130 BLM Stipulation to control surface use for potential special status plant and wildlife species.

EOI# CO00016974

PARCEL ID: 0237

CO, Little Snake Field Office, Bureau of Land Management, ACQ

T. 10 N., R. 95 W., 6TH PM

Sec. 11 E1/2.

Moffat County

320 Acres

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

GRSG-NSO-46e(1) BLM Stipulation to protect Greater sage-grouse PHMA.

GRSG-TL-46e BLM Stipulation to prohibit activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood-rearing (March 1 to July 15).

GRSG-LN-46e BLM Stipulation to protect PHMA by limiting surface disturbance to 3 percent and limiting density of infrastructure to 1 per 640 acres in PHMA.

LS-NSO-105 BLM Stipulation to protect perennial water sources.

For the following lands:

T. 10 N., R. 95 W., 6TH PM

Sec. S1/2SE1/4,NWSE.

LS-CSU-108 BLM Stipulation to protect high priority sagebrush habitats.

LS-CSU-130 BLM Stipulation to control surface use for potential special status plant and wildlife species.

EOI# CO00016974

PARCEL ID: 5994 Split Estate

CO, Little Snake Field Office, BLM, PD

PVT:BUREAU OF LAND MANAGEMENT

T. 12 N., R. 101 W., 6TH PM

Sec. 16 LOTS 1-4;

Sec. 17 LOTS 1;

Sec. 18 LOTS 7-12;
Sec. 19 LOTS 5;
Sec. 19 NE1/4NW1/4;
Sec. 21 LOTS 14,16;
Sec. 21 S1/2SE1/4.

Moffat County
564.62 Acres

CO-29 BLM Stipulation to alert lessee of a paleontological area inventory requirement.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

CO-57 BLM Stipulation to protect Wildlife-migration corridors

GRSG-TL-46e BLM Stipulation to prohibit activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood-rearing (March 1 to July 15).

LS-CSU-107 BLM Stipulation to protect medium priority sagebrush habitat.

For the following lands:

T. 12 N., R. 101 W., 6TH PM,

Sec. 16 LOTS 1-4;

Sec. 21 LOTS 14,16, S1/2SE1/4;

LS-CSU-108 BLM Stipulation to protect high priority sagebrush habitats

For the following lands:

T. 12 N., R. 101 W., 6TH PM,

Sec. 17 LOTS 1;

Sec. 18 LOTS 7-12;

Sec. 19 LOTS 5, NE1/4NW1/4;

LS-CSU-130 BLM Stipulation to control surface use for potential special status plant and wildlife species.

LS-NSO-105 BLM Stipulation to protect perennial water sources.

For the following lands:

T. 12 N., R. 101 W., 6TH PM,

Sec. 16 LOTS 3,4;

Sec. 17 LOTS 1;

Sec. 18 LOTS 7;

Sec. 21 S1/2SE1/4;

LS-NSO-106 BLM Stipulation to protect raptor nest sites.

For the following lands:

T. 12 N., R. 101 W., 6TH PM,

Sec. 16 LOTS 1-3;

Sec. 18 LOTS 7-9,12;

Sec. 19 LOTS 5, NE1/4NW1/4;

LS-TL-138 BLM Stipulation to protect pronghorn crucial winter range

LS-TL-143 BLM Stipulation to protect ferruginous hawk nesting activities

For the following lands:

T. 12 N., R. 101 W., 6TH PM,

Sec. 18 LOTS 7-12;

Sec. 19 LOTS 5, NE1/4NW1/4;

Sec. 21 LOTS 14,16;

EOI #CO00015055

PARCEL ID: 0005

CO, Little Snake Field Office, BLM, PD

T. 12 N., R. 102 W., 6TH PM

Sec. 13 LOTS 1-3,7,8;

Sec. 24 LOTS 1,3;

Sec. 24 N1/2NE1/4,SE1/4NE1/4.

Moffat County

343.39 Acres

CO-29 BLM Stipulation to alert lessee of a paleontological area inventory requirement.

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

CO-57 BLM Stipulation to protect Wildlife-migration corridors

GRSG-NSO-46e(2) BLM Stipulation to prohibit surface occupancy within 2 miles of active Greater sage-grouse leks in GHMA.

For the following lands:

T. 12 N., R. 102 W., 6TH PM,

Sec. 13 LOTS 2,3,7,8;

Sec. 24 LOTS 1,3;

Sec. 24 N1/2NE1/4;

GRSG-TL-46e BLM Stipulation to prohibit activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood-rearing (March 1 to July 15).

LS-CSU-108 BLM Stipulation to protect high priority sagebrush habitats.

LS-CSU-111 BLM Stipulation to protect steep slopes.

For the following lands:

T. 12 N., R. 102 W., 6TH PM,

Sec. 13 LOTS 1-3,7,8;

Sec. 24 LOTS 1, N1/2NE1/4,SE1/4NE1/4;

LS-CSU-130 BLM Stipulation to control surface use for potential special status plant and wildlife species.

LS-NSO-105 BLM Stipulation to protect perennial water sources.

For the following lands:

T. 12 N., R. 102 W., 6TH PM,

Sec. 24 LOTS 1,3, N1/2NE1/4,SE1/4NE1/4;

LS-TL-138 BLM Stipulation to protect pronghorn crucial winter range

LS-TL-143 BLM Stipulation to protect ferruginous hawk nesting activities

EOI #CO00015053

PARCEL ID: 0129

CO, White River Field Office, BLM, PD

T. 1 N., R. 99 W., 6TH PM

Sec. 27 LOTS 1,10.

Rio Blanco County

80.15 Acres

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis

WR-TL-14 BLM Stipulation to reduce the intensity, frequency, and extent of disturbances imposed on big game animals occupying defined winter range and winter concentration area habitats during periods when animals are physiologically or energetically challenged.

WR-TL-16 BLM Stipulation to prevent disruptions of nesting raptors that may result in absences of adults sufficient to cause direct or indirect mortality of the eggs or young or the premature departure of young from the nest.

EOI #CO00016643

PARCEL ID: 0264

CO, White River Field Office, Bureau of Land Management, PD

T. 2 N., R. 100 W., 6TH PM

Sec. 1 LOTS 5-8,14;

Sec. 1 S1/2N1/2,S1/2;

Sec. 2 LOTS 5,6,18,20,21;

Sec. 2 SE1/4NE1/4,NE1/4SW1/4,S1/2SW1/4,SE1/4;

Sec. 11 N1/2,SE1/4.

Rio Blanco County

1471.54 Acres

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

GRSG-TL-46e BLM Stipulation to prohibit activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood-rearing (March 1 to July 15).

For the following lands:

T. 2 N., R. 100 W., 6TH PM

Sec. 1 LOTS 5-8,14;

Sec. 1 S1/2N1/2,S1/2;

Sec. 2 LOTS 5,6,18,20,21;

Sec. 2 SE1/4NE1/4,NE1/4SW1/4,S1/2SW1/4,SE1/4;

Sec. 11 N1/2,N1/2SE1/4,SW1/4SE1/4.

WR-NSO-15 BLM Stipulation to protect remnant vegetation associations.

For the following lands:

T. 2 N., R. 100 W., 6TH PM

Section 1: SWSW;

WR-NSO-17 BLM Stipulation to protect designated critical habitat for Federally listed fish species.

For the following lands:

T. 2 N., R. 100 W., 6TH PM

Sec. 1 LOTS 5 thru 8,14;

Sec. 1 S1/2N1/2,;

Sec. 2 LOTS 5,6,18,20,21;

Sec. 2 NE1/4SW1/4,S1/2SW1/4,SE1/4;

WR-NSO-26 BLM Stipulation to protect occupied and/or suitable habitat for BLM sensitive plants.

For the following lands:

T. 2 N., R. 100 W., 6TH PM

Sec. 1 LOT 8;

Sec. 1 SWNW,WE1/2SW, SESW;

Sec. 2 LOT 5;

Sec. 2 SENE;

Sec. 11 NWSE, E1/2SE.

WR-NSO-34 BLM Stipulation to protect Areas of Critical Environmental Concern and the natural resources for which they were designated.

For the following lands:

T. 2 N., R. 100 W., 6TH PM

Sec. 1 LOTS 5-7;

Sec. 2 LOT 6.

WR-CSU-10 BLM Stipulation to protect soils on natural slopes greater than or equal to 35 percent but less than 50 percent.

For the following lands:

T. 2 N., R. 100 W., 6TH PM

Sec. 1 LOTS 5-7;

Sec. 1 S1/2N1/2,SW1/4,SW1/4SE1/4;

Sec. 2 LOTS 20,21;

Sec. 2 SE1/4NE1/4,SE1/4;

Sec. 11 NW1/4NW1/4,SE1/4SE1/4.

WR-CSU-11 BLM Stipulation to protect the productivity of saline soils and to reduce salt and selenium loading of surface waters.

For the following lands:

T. 2 N., R. 100 W., 6TH PM

Sec. 1 LOTS 7,8;

Sec. 2 LOTS 5,6.

WR-CSU-12 BLM Stipulation to maintain the vegetative, hydrologic, and geomorphic functionality of stream channels, water quality characteristics, spring function, water well integrity, proper wetland/riparian function, aquatic health, aquatic and wetland habitat, macroinvertebrate communities, downstream fisheries and natural sediment and salt processes.

For the following lands:

T. 2 N., R. 100 W., 6TH PM

Sec. 1 LOTS 5-7;

Sec. 1 NE1/4SW1/4,S1/2SW1/4,W1/2SE1/4;

Sec. 2 LOT 6;

Sec. 2 SW1/4SW1/4,SE1/4SE1/4;

Sec. 11 NW1/4NW1/4,NE1/4NE1/4.

WR-CSU-26 BLM Stipulation to protect visual resources, night skies and soundscapes.

For the following lands:

T. 2 N., R. 100 W., 6TH PM

Sec. 1 LOTS 5-8;

Sec. 1 NWSW, SWNW, SENW, NESW, NWSE, SWNE, SENE;

Sec. 2 LOTS 5,6,18,20, 21;

Sec. 2 SWSW, NWSE, SENE, NESE;

WR-TL-12 BLM Stipulation to reduce the intensity, frequency, and extent of disturbances imposed on big game animals occupying defined severe winter range habitats during periods when animals are physiologically or energetically challenged.

WR-TL-22 BLM Stipulation to protect Greater Sage-grouse in important winter use areas.

WR-LN-09 BLM Stipulation to maintain the occupancy, integrity, and extent of white-tailed prairie dog habitat in support of a reintroduced population of federally endangered black-footed ferret and to minimize the risk of adverse impacts imposed on black-footed ferrets or their habitat.

WR-LN-12 BLM Stipulation to protect paleontological resources.

EOI# CO00017113

PARCEL ID: 6210

CO, White River Field Office, Bureau of Land Management, PD

T. 2 N., R. 100 W., 6TH PM

Sec. 12 ALL;

Sec. 13 N1/2,SE1/4;

Sec. 24 NE1/4.

Rio Blanco County

1280 Acres

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

GRSG-TL-46e BLM Stipulation to prohibit activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood-rearing (March 1 to July 15).

For the following lands:

T. 2 N., R. 100 W., 6TH PM

Sec. 12 N1/2,N1/2SW1/4,SE1/4SW1/4,SE1/4;

Sec. 13 E1/2,NE1/4NW1/4;

Sec. 24 NE1/4.

WR-NSO-12 BLM Stipulation to protect soils on natural slopes greater than or equal to 50 percent.

For the following lands:

T. 2 N., R. 100 W., 6TH PM

Sec. 12 NW1/4SW1/4.

WR-NSO-15 BLM Stipulation to protect remnant vegetation associations.

For the following lands::

T. 2 N., R. 100 W., 6TH PM

Sec. 12 W1/2NW1/4, NWSW.

WR-NSO-26 BLM Stipulation to protect occupied and/or suitable habitat for BLM sensitive plants.

For the following lands:

T. 2 N., R. 100 W., 6TH PM

Sec. 12 N1/2NW1/4, W1/2SW1/4;

Sec. 13 NWNW.

WR-CSU-10 BLM Stipulation to protect soils on natural slopes greater than or equal to 35 percent but less than 50 percent.

For the following lands:

T. 2 N., R. 100 W., 6TH PM

Section 12: W2NW,W2SW;

Section 24: S2NE,SWNW,W2SW,SESW,SE;

WR-CSU-12 BLM Stipulation to maintain the vegetative, hydrologic, and geomorphic functionality of stream channels, water quality characteristics, spring function, water well integrity, proper wetland/riparian function, aquatic health, aquatic and wetland habitat, macroinvertebrate communities, downstream fisheries and natural sediment and salt processes.

For the following lands:

T. 2 N., R. 100 W., 6TH PM

Sec. 12 NW1/4NE1/4,SE1/4NE1/4,N1/2NW1/4,E1/2SE1/4;

Sec. 13 E1/2NE1/4,NE1/4SE1/4;

Sec. 24 NE1/4NE1/4.

WR-CSU-26 BLM Stipulation to protect visual resources, night skies and soundscapes.

For the following lands:

T. 2 N., R. 100 W., 6TH PM

Sec. 24 SENE;

WR-TL-12 BLM Stipulation to reduce the intensity, frequency, and extent of disturbances imposed on big game animals occupying defined severe winter range habitats during periods when animals are physiologically or energetically challenged.

WR-LN-12 BLM Stipulation to protect paleontological resources.

EOI# CO00017113

PARCEL ID: 6196

CO, White River Field Office, Bureau of Land Management, PD

T. 1 S., R. 104 W., 6TH PM

Sec. 15 LOTS 1, 2.

Rio Blanco County

90.65 Acres

CO-34 BLM Stipulation to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

CO-39 BLM Stipulation to protect cultural resources.

CO-56 BLM Stipulation to alert lessee of potential supplementary air analysis.

WR-NSO-12 BLM Stipulation to protect soils on natural slopes greater than or equal to 50 percent.

WR-NSO-25 BLM Stipulation to protect occupied and/or suitable habitat for federally listed, proposed, and candidate plant species:

WR-NSO-26 BLM Stipulation to protect occupied and/or suitable habitat for BLM sensitive plants.

WR-CSU-10 BLM Stipulation to protect soils on natural slopes greater than or equal to 35 percent but less than 50 percent.

WR-CSU-26 BLM Stipulation to protect visual resources, night skies and soundscapes.

For the following lands:

T. 1 S., R. 104 W., 6TH PM

Sec. 15 LOT 2;

WR-TL-14 BLM Stipulation to reduce the intensity, frequency, and extent of disturbances imposed on big game animals occupying defined winter range and winter concentration area habitats during periods when animals are physiologically or energetically challenged.

WR-LN-12 BLM Stipulation to protect paleontological resources.

EOI# CO00016958

Appendix B. Stipulation Exhibits

EXHIBIT CO-03
NO SURFACE OCCUPANCY STIPULATION

Lease Number: <LEASE_NUMBER>

No surface occupancy or use is allowed on the lands described below (legal description or other description):
<LEGAL_DESCRIPTIONS>

For the purpose of:

To protect raptor nests within a one-eighth mile radius from the site.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

Exception Criteria:

An exception may be granted depending on current usage, or on the geographical relationship to topographic barriers and vegetation screening.

EXHIBIT CO-09
TIMING LIMITATION STIPULATION

Lease Number: <LEASE_NUMBER>

No surface use is allowed during the following time period(s). This stipulation does not apply to operation and maintenance of production facilities.

December 1 through April 30

On the lands described below:

<LEGAL_DESCRIPTIONS>

For the purpose of (reasons):

To protect big game (mule deer, elk, pronghorn antelope, and bighorn sheep) winter range, including crucial winter habitat and other definable winter range as mapped by the Colorado Division of Wildlife. This may apply to sundry notice that require an environmental analysis.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of the stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

Exception Criteria:

An exception may be granted under mild winter conditions for the last 60 days of the closure.

EXHIBIT CO-12
TIMING LIMITATION STIPULATION

Lease Number: <LEASE_NUMBER>

No surface use is allowed during the following time period(s). This stipulation does not apply to operation and maintenance of production facilities.

May 1 through July 15

On the lands described below:

<LEGAL_DESCRIPTIONS>

For the purpose of (reasons):

To protect Rocky Mountain bighorn sheep lambing

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of the stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

EXHIBIT CO-18
TIMING LIMITATION STIPULATION

Lease Number: <LEASE_NUMBER>

No surface use is allowed during the following time period(s). This stipulation does not apply to operation and maintenance of production facilities.

February 1 through August 15

On the lands described below:
<LEGAL_DESCRIPTIONS>

For the purpose of (reasons):

To protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of the stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

Exception Criteria:

Exceptions may be granted during years when the nest site is unoccupied, when occupancy ends by or after May 15, or once the young have fledged and dispersed from the nest.

EXHIBIT CO-19
TIMING LIMITATION STIPULATION

Lease Number: <LEASE_NUMBER>

No surface use is allowed during the following time period(s). This stipulation does not apply to operation and maintenance of production facilities.

February 1 through August 15

On the lands described below:
<LEGAL_DESCRIPTIONS>

For the purpose of (reasons):

To protect ferruginous hawk nesting and fledgling habitat during usage for a one-quarter mile buffer around the nest.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of the stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

Exception Criteria:

Exceptions may be granted during years when a nest site is unoccupied, when occupancy ends by or after May 15, or once the young have fledged and dispersed from the nest.

EXHIBIT CO-23
TIMING LIMITATION STIPULATION

Lease Number: <LEASE_NUMBER>

No surface use is allowed during the following time period(s). This stipulation does not apply to operation and maintenance of production facilities.

November 16 through April 15

On the lands described below:

<LEGAL_DESCRIPTIONS>

For the purpose of (reasons):

To protect bald eagle winter roost sites within a one-half mile buffer around the site

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of the stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

Exception Criteria:

Exceptions may be granted for partial or complete visual screening of the oil and gas activity from the primary zone (that is, one-quarter mile around the roost site).

EXHIBIT CO-28
CONTROLLED SURFACE USE STIPULATION

Lease Number: <LEASE_NUMBER>

Surface occupancy or use is subject to the following special operating constraints.

On the lands described below:
<LEGAL_DESCRIPTIONS>

For the purpose of:

To protect perennial water impoundments and streams, and/or riparian/wetland vegetation by moving oil and gas exploration and development beyond the riparian vegetation zone.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820. See also Geothermal PEIS ROD section 2.3.3 at page 2-6.)

Exception Criteria:

Exceptions may be granted only if an on-site impact analysis shows no degradation of the resource values.

**EXHIBIT CO-29
PALEONTOLOGICAL CSU CO
CONTROLLED SURFACE USE**

Lease Number: <LEASE_NUMBER>

Stipulation: Surface occupancy or use may be restricted due to paleontological resources. Special design, construction, and implementation measures, including relocation of operations by more than 200 meters (656 feet), may be required.

The lease area contains a moderate to high potential for paleontological resources (i.e. Potential Fossil Yield Classification Class 3-5). An inventory of paleontological resources may be required before construction and drilling may commence. The Authorized Officer may require that a qualified paleontologist be present to monitor operations during surface disturbing activities.

On the following lands:
<LEGAL_DESCRIPTION>

Purpose: To protect scientific information that may be damaged from inadvertent or authorized uses.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see Bureau of Land Management Manuals 1624 and 3101 or Forest Service Manuals 1950 and 2820.)

Exception: An exception is a one-time exemption for a particular site within the leasehold. Exceptions are determined on a case-by-case basis. The stipulation continues to apply to all other sites within the leasehold.

The Authorized Officer may grant an exception to a stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently such that: 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the RMP; or 2) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may be required to consult with other government agencies and/or the public in order to make this determination.

Modification: A modification is a change to the provisions of a lease stipulation, either temporarily or for the term of the lease. Depending on the specific modification, the stipulation may or may not apply to all sites within the leasehold to which the restrictive criteria are applied.

In accordance with the provisions of 43 C.F.R. 3101.1-4, the Authorized Officer may modify a stipulation or the area subject to the stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently. The Authorized Officer may modify a stipulation as a result of new information if: 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the RMP; 2) the protection provided by the stipulation is no longer sufficient to meet resource objectives established in the RMP; or 3) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may be required to consult with other government agencies and/or the public in order to make this determination, and the modification may be subject to public review for at least a 30 day period.

Waiver: A waiver is a permanent exemption from a lease stipulation. When a waiver is granted, the stipulation no longer applies anywhere within the leasehold.

In accordance with the provisions of 43 C.F.R. 3101.1-4, the Authorized Officer may waive a stipulation if it is determined that the factors leading to its inclusion in the lease no longer exist. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may be required to consult with other government agencies and/or the public in order to make this determination, and the waiver may be subject to public review for at least a 30 day period.

EXHIBIT CO-34
ENDANGERED SPECIES ACT
SECTION 7 CONSULTATION STIPULATION

Lease Number: <LEASE_NUMBER>

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.

On the lands described below:

<LEGAL_DESCRIPTIONS>

**EXHIBIT CO-39
CULTURAL RESOURCES
CONTROLLED SURFACE USE**

Lease Number: <LEASE_NUMBER>

This lease may be found to contain historic properties and/or resources protected under the National Historic Preservation Act (NHPA), American Indian Religious Freedom Act, Native American Graves Protection and Repatriation Act, E.O.13007, or other statutes and executive orders. The BLM will not approve any ground disturbing activities that may affect any such properties or resources until it completes its obligations under applicable requirements of the NHPA and other authorities. The BLM may require modification to exploration or development proposals to protect such properties, or disapprove any activity that is likely to result in adverse effects that cannot be successfully avoided, minimized or mitigated.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

On the lands described below:

<LEGAL_DESCRIPTIONS>

**EXHIBIT CO-56
AIR QUALITY
LEASE NOTICE**

Lease Number: <LEASE_NUMBER>

Due to potential air quality concerns, supplementary air quality analysis may be required for any proposed development of this lease. This may include preparing a comprehensive emissions inventory, performing air quality modeling, and initiating interagency consultation with affected land managers and air quality regulators to determine potential mitigation options for any predicted significant impacts from the proposed development. Potential mitigation may include limiting the time, place, and pace of any proposed development, as well as providing for the best air quality control technology and/or management practices necessary to achieve area-wide air resource protection objectives. Mitigation measures would be analyzed through the appropriate level of NEPA analysis to determine effectiveness, and will be required or implemented as a permit condition of approval (COA). At a minimum, all projects and permitted uses implemented under this lease will comply with all applicable National Ambient Air Quality Standards and ensure Air Quality Related Values are protected in nearby Class I or Sensitive Class II areas that are afforded additional air quality protection under the Clean Air Act (CAA).

On the lands described below:

<LEGAL_DESCRIPTION>

**EXHIBIT CO-57
WILDLIFE-MIGRATION CORRIDOR & WINTER RANGE
LEASE NOTICE**

Lease Number: <LEASE_NUMBER>

The lease area is located within a big game migration corridor and/or big game winter range identified or currently under review by Colorado Parks and Wildlife. The lessee or their designated operator will be required to work with the BLM and coordinate with Colorado Parks and Wildlife to take reasonable measures (see 43 CFR 3101.1-2) to avoid and minimize impacts to maintain big game migration corridor and big game winter range functionality. Big game seasonal migration corridors and winter range are mapped in the Resource Management Plan, BLM's GIS database, or other maps provided by local, state, federal or tribal agencies that are analyzed and accepted by the BLM. The BLM will encourage the use of Master Development Plans for operations proposed on this lease in accordance with Onshore Oil and Gas Order No. 1.

On the lands described below:

<LEGAL_DESCRIPTION>

EXHIBIT GRSG-NSO-46e(1)
GREATER SAGE-GROUSE
NO SURFACE OCCUPANCY IN PHMA

Lease Number: <LEASE_NUMBER>

Stipulation: This lease is subject to NSO and does not guarantee the lessee the right to occupy the surface of the lease for the purpose of producing oil and natural gas. In areas open to fluid mineral leasing with NSO stipulations, fluid mineral leasing activities are permitted, but surface-disturbing activities cannot be conducted on the surface of the land unless an exception, modification, or waiver is granted.

Surface occupancy or use will be restricted to no more than 1 disruptive facility per 640 acres, and the cumulative value of all applicable surface disturbances, existing or future, must not result in greater than 3 percent loss of the sagebrush habitat within PHMA (as measured by Colorado Management Zone).

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Purpose: Manage fluid minerals to avoid, minimize, and compensate for: 1) direct disturbance, displacement, or mortality of GRSG; 2) direct loss of habitat, or loss of effective habitat through fragmentation; and 3) cumulative landscape-level impacts.

Exception/Modification: Exceptions based on conservation gain (ii) may only be considered in: (a) PHMA of mixed ownership where federal minerals underlie less than 50 percent of the total surface; or (b) areas of BLM-administered lands where the proposed exception is an alternative to an action occurring on a nearby parcel subject to a valid federal fluid mineral lease existing as of the date of this RMP [revision or amendment]. Exceptions based on conservation gain must also include measures, such as enforceable institutional controls and buffers, sufficient to allow the BLM to conclude that such benefits will endure for the duration of the proposed action's impacts.

The BLM Authorized Officer may approve any exceptions to this lease stipulation only with the concurrence of the BLM State Director. The BLM Authorized Officer may not grant an exception unless the applicable state wildlife agency, USFWS, and BLM unanimously find that the proposed action satisfies (i) or (ii). A team of one field biologist or other GRSG expert shall initially make such finding from each respective agency. In the event the initial finding is not unanimous, the finding may be elevated to the appropriate BLM State Director, USFWS State Ecological Services Director, and state wildlife agency head for final resolution. In the event their finding is not unanimous, the exception will not be granted. Approved exceptions will be made publicly available at least quarterly.

Waiver: No **waivers** or **modifications** to fluid mineral lease NSO stipulation will be granted. The BLM Authorized Officer may grant an exception to this NSO stipulation only where the proposed action:

(i) Would not have direct, indirect, or cumulative effects on GRSG or its habitat; or

(ii) Is proposed to be undertaken as an alternative to a similar action occurring on a nearby parcel, and would provide a clear conservation gain to GRSG.

EXHIBIT GRSG-NSO-46e(2)
GREATER SAGE-GROUSE
NO SURFACE OCCUPANCY WITHIN 2 MILES OF ACTIVE LEKS IN GHMA

Lease Number: <LEASE_NUMBER>

Stipulation: Apply no surface occupancy within 2 miles of active leks in GHMA. This lease is subject to NSO and does not guarantee the lessee the right to occupy the surface of the lease for the purpose of producing oil and natural gas. In areas open to fluid mineral leasing with NSO stipulations, fluid mineral leasing activities are permitted, but surface-disturbing activities cannot be conducted on the surface of the land unless an exception, modification, or waiver is granted. Surface occupancy or use will be restricted to no more than 1 disruptive facility per 640 acres, and the cumulative value of all applicable surface disturbances, existing or future, must not result in greater than 3 percent loss of the sagebrush habitat within PHMA (as measured by Colorado Management Zone).

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Purpose: Manage fluid minerals to avoid, minimize, and compensate for: 1) direct disturbance, displacement, or mortality of GRSG; 2) direct loss of habitat, or loss of effective habitat through fragmentation; and 3) cumulative landscape-level impacts.

Exception: In consultation with the State of Colorado, an exception to occupancy of the surface associated with GRSG-NSO-46e(2) in GHMA could be granted on a one-time basis (any occupancy must be removed within 1 year of approval) based on an analysis of the following factors:

- Location of proposed lease activities in relation to critical GRSG habitat areas as identified by factors including, but not limited to, average male lek attendance and/or important seasonal habitat
- An evaluation of the potential threats from proposed lease activities that may affect the local population as compared to benefits that could be accomplished through compensatory or off-site mitigation (see Chapter 2, Section 2.6.3 of the Proposed LUPA/Final EIS, Regional Mitigation)
- An evaluation of the proposed lease activities in relation to the site-specific terrain and habitat features. For example, in the vicinity of leks, local terrain features such as ridges and ravines may reduce the habitat importance and shield nearby habitat from disruptive factors.

Modification: In consultation with the State of Colorado, a modification (changes to the stipulation either temporarily or for the term of either part of or the entire lease) to GRSG-NSO-46e(2) could be granted based on an analysis of the following factors:

- Location of proposed lease activities in relation to critical GRSG habitat areas as identified by factors including, but not limited to, average male lek attendance and/or important seasonal habitat
- An evaluation of the potential threats from proposed lease activities that may affect the local population as compared to benefits that could be accomplished through

compensatory or off-site mitigation (see Chapter 2, Section 2.6.3 of the Proposed LUPA/Final EIS, Regional Mitigation)

- An evaluation of the proposed lease activities in relation to the site-specific terrain and habitat features. For example, in the vicinity of leks, local terrain features such as ridges and ravines may reduce the habitat importance and shield nearby habitat from disruptive factors.

Waiver: No waivers are authorized unless the area or resource mapped as possessing the attributes protected by the stipulation is determined during collaboration with the State of Colorado to lack those attributes or potential attributes. A 30-day public notice and comment period is required before waiver of a stipulation. Waivers would require BLM State Director approval.

**EXHIBIT GRSG-TL-46E
GREATER SAGE-GROUSE
TIMING LIMITATION**

Lease Number: <LEASE_NUMBER>

Stipulation: No activity associated with construction, drilling, or completions within 4 miles of active leks during lekking, nesting, and early brood-rearing (March 1 to July 15).

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Purpose: Manage fluid minerals to avoid, minimize, and compensate for: 1) direct disturbance, displacement, or mortality of GRSG; 2) direct loss of habitat, or loss of effective habitat through fragmentation; and 3) cumulative landscape-level impacts. .

Exception/Modification: In consultation with the State of Colorado, a modification or an exception to GRSG TL-46 could be granted based on an analysis of the following factors:

- Location of proposed lease activities in relation to critical GRSG habitat areas as identified by factors including, but not limited to, average male lek attendance and/or important seasonal habitat;
- An evaluation of the potential threats from proposed lease activities that may affect the local population as compared to benefits that could be accomplished through compensatory or off-site mitigation (see Chapter 2, Section 2.6.3 of the Proposed LUPA/Final EIS, Regional Mitigation);
- An evaluation of the proposed lease activities in relation to the site-specific terrain and habitat features. For example, within 4 miles of a lek, local terrain features such as ridges and ravines may reduce the habitat importance and shield nearby habitat from disruptive factors.

Waiver: No waivers are authorized unless the area or resource mapped as possessing the attributes protected by the stipulation are determined during collaboration with Colorado Parks and Wildlife to lack those attributes or potential attributes. A 30-day public notice and comment period is required before waiver of a stipulation. Waivers would require BLM State Director approval.

**EXHIBIT GRSG-LN-46E
GREATER SAGE-GROUSE
LEASE NOTICE**

Lease Number: <LEASE_NUMBER>

Stipulation: This lease is subject to NSO and does not guarantee the lessee the right to occupy the surface of the lease for the purpose of producing oil and natural gas. In areas open to fluid mineral leasing with NSO stipulations, fluid mineral leasing activities are permitted, but surface-disturbing activities cannot be conducted on the surface of the land unless an exception, modification, or waiver is granted.

Surface occupancy or use will be restricted to no more than 1 disruptive facility per 640 acres, and the cumulative value of all applicable surface disturbances, existing or future, must not result in greater than 3 percent loss of the sagebrush habitat within PHMA (as measured by Colorado Management Zone).

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Purpose: Manage fluid minerals to avoid, minimize, and compensate for: 1) direct disturbance, displacement, or mortality of GRSG; 2) direct loss of habitat, or loss of effective habitat through fragmentation; and 3) cumulative landscape-level impacts. .

Exception/Modification/Waiver: Refer to p. G-4, G-5 in the *Northwest Colorado Greater Sage-grouse Approved Resource Management Plan Amendment* for US Department of the Interior, Bureau of Land Management, Washington D.C., March 2019.

**EXHIBIT WR-NSO-12
STEEP NATURAL SLOPES
NO SURFACE OCCUPANCY**

Lease Number: <LEASE_NUMBER>

Stipulation: No surface occupancy or disturbance will be allowed on natural slopes greater than or equal to 50 percent (as defined by digital elevation model data).

On the following lands:
<LEGAL_DESCRIPTIONS>

Purpose: To protect soils on natural slopes greater than or equal to 50 percent.

Exception: The Authorized Officer may authorize surface occupancy if an environmental analysis finds the nature of the proposed action could be conditioned so as not to negatively impact the stability of or productivity of the steep slopes identified.

Modification: Site-specific modification may be granted by the Authorized Officer pending determination that a portion of the proposed surface disturbance meets the following conditions:

- 1) More than 75 percent of the proposed surface disturbance and infrastructure are on stable soils that are not on natural slopes greater than or equal to 50 percent; and
- 2) The proposed action utilizes construction, reclamation, and design features that stabilize the site during occupation and restore the original contours after occupation.

Waiver: If better elevation data indicates that there are no natural slopes greater than or equal to 50 percent anywhere within the leasehold, the stipulation no longer applies.

EXHIBIT WR-NSO-15
REMNANT VEGETATION ASSOCIATIONS
NO SURFACE OCCUPANCY

Lease Number: <LEASE_NUMBER>

Stipulation: No surface occupancy or disturbance will be allowed within remnant vegetation associations (e.g., ponderosa pine stands and unique or ecologically intact sagebrush communities).

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Purpose: To conserve unique plant communities and remnant vegetation associations that are not otherwise protected.

Exception: An exception may be granted by the Authorized Officer if an environmental analysis determines that the activity will not impair values associated with the maintenance or viability of the species or communities. If an exception is granted reclamation of surface disturbance resulting from authorized activities within RVAs will use only locally gathered or genetic stock from locally gathered native species. Locally collected seed or genetic stock from locally gathered seed will be used for reclamation and available in adequate quantity for reclamation needs prior to issuance of the notice to proceed. If such seed is not available in adequate quantity, then collection from the site of disturbance will be required. All seed collection, storage, or increase would be conducted in accordance with approved collection, storage, and seed increase protocols. If three growing seasons pass without adequate collection to provide the quantity necessary for reclamation needs, the impact of using non-local native species on the genetic integrity of native species would be evaluated by the BLM and mitigated through site-specific environmental analysis.

Modification: The Authorized Officer may modify (increase, decrease, or relocate) the area subject to the stipulation if new remnant vegetation sites are discovered; or it is determined that the plant community has shifted; the occupied habitat of the species or community has increased or decreased; or that the nature or conduct of the activity, as proposed or conditioned, will not impair values associated with the maintenance or viability of the species or community.

Waiver: A waiver may be granted by the Authorized Officer if the species or community is no longer designated as unique or relict or if the site has been unoccupied by the species or community for a minimum period of 15 years.

EXHIBIT WR-NSO-17
ENDANGERED COLORADO RIVER FISH
NO SURFACE OCCUPANCY STIPULATION

Lease Number: <LEASE_NUMBER>

Stipulation: No surface occupancy or disturbance will be allowed within designated critical habitat for federally listed fish species (e.g., 100-year floodplain of the White River below Rio Blanco Lake).

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Purpose: Confining surface disturbance and surface use activities to areas outside the flood prone area would reduce the immediate risk of sediment and contaminant discharge into occupied riverine habitat and the compromise of physical and biological habitat features that are essential to the proper functioning condition of the aquatic systems that support federally listed fishes.

Exception: The Authorized Officer, in consultation with the FWS and CPW, may grant an exception to this stipulation if environmental analysis establishes that the proposed action would not adversely influence important fishery functions or compromise the integrity of constituent elements of critical habitat. Exception requests will require the submission of a proponent-prepared spill/leak contingency plan that would be analyzed integral with BLM's biological assessment to the FWS.

Specific measures that could be considered for granting exceptions include, but would not be limited to the following:

Pipelines could not be constructed in sites identified by the CPW or FWS as important for Colorado pikeminnow reproduction and recruitment of young.

Pipelines transporting potential contaminants will be equipped with automatic shut off valves and may be required to be double-walled where they cross the White River's 100-year floodplain or the lower mile of its larger perennial tributaries (e.g., Piceance Creek, Yellow Creek, Crooked Wash).

Modification: The Authorized Officer, in consultation with the FWS, may modify the provisions of the NSO if the proposed action can be sited, conducted, or conditioned to remain compatible with habitat protection and species recovery objectives.

Waiver: The Authorized Officer may grant a waiver if the BLM, in consultation with the FWS, establishes that the White River's designated critical habitat is incapable of serving the long term requirements of Colorado pikeminnow and that this aquatic system no longer warrants consideration as a recovery component for the four species of endangered Colorado River fishes.

**EXHIBIT WR-NSO-25
FEDERALLY LISTED PLANT SPECIES
NO SURFACE OCCUPANCY**

Lease Number: <LEASE_NUMBER>

Stipulation: No surface occupancy or disturbance will be allowed within 660 feet of occupied and suitable habitat for federally listed, proposed, and candidate plant species, including any new habitat mapped as a result of future surveys.

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Purpose: To protect federally listed, proposed, and candidate plant species and designated critical habitat from direct and indirect impacts, including loss and degradation of habitat due to dust transport, weed invasion, chemical and produced-water spills. It also reduces impacts to important pollinators and their habitat.

Exception: The following exceptions may only be granted if they do not preclude the survival and recovery of the species, as agreed or consulted upon by the BLM and FWS, with particular emphasis on protecting populations within ACECs:

Maintenance of existing facilities.

Surface occupancy may be authorized within 330 feet of occupied habitat following an environmental analysis and ESA Section 7 consultation or conference with the FWS (for species listed under the ESA) that results in “no effect” or concurrence with a wholly beneficial effect determination. Surface occupancy may be considered for actions when the overall impacts to the species’ habitat from an action would be less than compared to other project alternatives that maintain a 330 foot buffer around occupied habitat. The proponent must convincingly demonstrate through in-depth biological analyses and collaboration with BLM and FWS that any action within 330 feet is the least damaging option when compared to other project alternatives. The FWS must concur with the proposed action in their Biological Opinion for approval of the exception to be considered by the BLM.

Surface occupancy may be authorized within 330-660 feet of occupied habitat or anywhere within suitable habitat if the proposed action results in insignificant (not reasonably measured/detected), discountable (extremely unlikely to occur), or wholly beneficial effects (no negative impacts) to occupied habitat or a similar level of impacts to suitable habitat (as defined under ESA Section 7 implementing regulations).

Surface occupancy may be authorized anywhere within suitable habitat for new construction/disturbances located adjacent to an existing disturbance if an environmental analysis of the proposed action indicates that the activity could be conditioned so as to result in a much reduced cumulative environmental impact to the species compared to other project alternatives.

Exceptions may be contingent on special design, construction, and implementation measures. Mitigation measures may include, but are not limited to:

Relocation of operations by more than 660 feet;

Delaying operations by more than 60 days so that construction occurs outside of the blooming season (i.e., construction could occur September through March;

Minimizing the area of disturbance;

Intensive control of fugitive dust;

Using signs, fencing, and other deterrents to reduce possible human disturbance;

Monitoring and control of invasive plants;

Specialized reclamation procedures (e.g., separating soil and subsoil layers with barriers to reclaim in the correct order and additional emphasis on forbs in seed mixes to promote pollinator habitat;

Long term monitoring of the species and/or habitat;

Use of a qualified, independent third-party contractor provide general oversight and assure compliance with project terms and conditions; and/or

Consideration of off-site mitigation such as conservation easements, or mitigation banking to offset impacts to occupied plant populations, adequate funding of research, or habitat protection/improvement projects.

Modification: If the site has been unoccupied by the species for a minimum period of 20 years then the habitat will be considered as suitable instead of occupied. Due to the persistence of the seed bank and variability in environmental conditions related to germination, surveys would be required over multiple years to make a determination that the area is no longer occupied. The BLM will confer with FWS in determining whether an area should be considered as suitable or occupied habitat.

Waiver: A waiver may be granted by the Authorized Officer if the species becomes extinct or if the species is downgraded in status, the NSO stipulation may be replaced with less stringent criteria.

EXHIBIT WR-NSO-26
BLM SENSITIVE PLANT SPECIES
NO SURFACE OCCUPANCY

Lease Number: <LEASE_NUMBER>

Stipulation: No surface occupancy or disturbance will be allowed within 330 feet of occupied or suitable habitat for BLM sensitive plants.

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Purpose: To protect BLM sensitive plant species from direct and indirect impacts, including loss of habitat. The protection buffer reduces the risk of impacts to special status plant populations from dust transport, weed invasion, chemical and produced-water spills. It also reduces impacts to important pollinators and their habitat.

Exception: An exception may be granted by the Authorized Officer if it can be demonstrated that the activity would not cause adverse impacts or have negligible impacts to occupied and suitable habitat. An exception may be granted for maintenance of existing facilities or for new construction/disturbances located adjacent to an existing disturbance if an environmental analysis of the proposed action indicates that the activity could be conditioned so as to result in a much reduced cumulative environmental impact to the species compared to other project alternatives. If an exception is granted, special design, construction, reclamation, and implementation measures, including relocation of operations and postponing construction by more than 60 days, may be required. Specialized reclamation procedures may include:

Collection of seeds for sensitive plant species' genetic preservation, grow-out, and future reclamation attempts; and
Using a higher percentage of forbs in the reclamation seed mix to promote pollinator habitat.

Modification: The Authorized Officer may modify (increase, decrease, or relocate) the area subject to the stipulation if it is determined that the nature or conduct of the activity, as proposed or conditioned, would not impair values associated with the maintenance or recovery of the species. If the site has been unoccupied by the species for a minimum period of 20 years then the habitat will be considered as suitable instead of occupied. Due to the persistence of the seed bank and variability in environmental conditions related to germination, surveys would be required over multiple years to make a determination that the area is no longer occupied.

Waiver: If the species is removed from the Colorado BLM State Director's Sensitive Species List, a waiver may be granted by the Authorized Officer or the NSO stipulation may be replaced with less stringent criteria.

EXHIBIT WR-NSO-34
AREAS OF CRITICAL ENVIRONMENTAL CONCERN
NO SURFACE OCCUPANCY

Lease Number: <LEASE_NUMBER>

Stipulation: No surface occupancy or disturbance will be allowed within the boundaries of the following ACECs: Dudley Bluffs, Yanks Gulch/Upper Greasewood Creek, Lower Greasewood Creek, Raven Ridge, South Cathedral Bluffs, Deer Gulch, Ryan Gulch, Blacks Gulch, Coal Draw, Moosehead Mountain, White River Riparian and Duck Creek.

On the following lands described below:
<LEGAL_DESCRIPTIONS>

Purpose: These ACECs contain fossils of high scientific value; fragile soils; cultural resources; special status plants (federally listed, proposed, or candidate plant species, BLM sensitive species), important biologically diverse plant communities; riparian areas; bald eagle roosts; critical habitat for pikeminnow; and/or remnant vegetation associations.

Exception: The Authorized Officer may grant an exception to this stipulation if an environmental analysis indicates that the nature or conduct of the action, as proposed or conditioned, would not risk long-term or substantive compromise of the values or functions for which the ACEC was established or subsequently serves. Resource inventories, appropriate for the resource affected, may be required prior to considering any requests for exceptions. The granting of exceptions will be conditioned on the results of ESA consultation, species recovery plans, law or regulation, current BLM management policies, or resource-specific provisions expressed in related WRFO RMP stipulations.

Modification: The Authorized Officer may alter the temporal or spatial configuration of the applied NSO if an environmental analysis indicates that the action, as proposed or conditioned, may be conducted without risking long-term or substantive compromise of the values or functions for which the ACEC was established or subsequently serves.

Waiver: The Authorized Officer may waive the NSO if the ACEC no longer serves in the support of those values or functions for which the ACEC was established or subsequently served and where there is no reasonable likelihood of that utility being restored or redeveloping within reasonable timeframes.

**EXHIBIT WR-CSU-10
STEEP NATURAL SLOPES
CONTROLLED SURFACE USE**

Lease Number: <LEASE_NUMBER>

Stipulation: Surface disturbing activities will be allowed on natural slopes greater than or equal to 35 percent but less than 50 percent (as defined by digital elevation model data) only after an engineered construction/reclamation plan is submitted by the operator and approved by the Authorized Officer. The following items must be addressed in the plan:

How soil productivity will be restored; and

How surface runoff will be treated to avoid accelerated erosion such as riling, gullyng, piping, and mass wasting.

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Purpose: To protect soils on natural slopes greater than or equal to 35 percent but less than 50 percent.

Exception: An exception may be granted by the Authorized Officer if an environmental analysis of the proposed action identifies that the scale or nature of the operation would not result in any long term decrease in site productivity or increased erosion. An exception may also be granted by the Authorized Officer if a more detailed survey determines that the proposed action will not disturb soils on slopes greater than or equal to 35 percent.

Modification: None.

Waiver: None.

**EXHIBIT WR-CSU-11
SALINE SOILS
CONTROLLED SURFACE USE**

Lease Number: <LEASE_NUMBER>

Stipulation: Surface disturbing activities will be allowed in areas with saline soils (i.e., greater than 8 mmhos/cm), as identified in USDA NRCS Web Soil Survey, only after a reclamation plan is submitted by the operator and approved by the Authorized Officer. Operators must consider the stability and productivity of these soils in the reclamation plan and specifically address:

How soil productivity will be restored; and

How reclamation success will be evaluated.

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Purpose: To protect the productivity of saline soils and to reduce salt and selenium loading of surface waters.

Exception: An exception may be granted by the Authorized Officer if an environmental analysis of the proposed action identifies that the scale of the operation would not result in any long term decrease in site productivity or increased erosion. An exception may also be granted if a more detailed soil survey, i.e., Order I, conducted by a qualified soil scientist, finds the soil properties associated with the proposed action are not saline.

Modification: None.

Waiver: None.

**EXHIBIT WR-CSU-12
WATER RESOURCES
CONTROLLED SURFACE USE**

Lease Number: <LEASE_NUMBER>

Stipulation: Surface disturbance and occupation will be avoided in the following areas:

Mapped 100-year floodplains;

Areas within 500 feet from perennial waters, springs, water wells, and wetland/riparian areas; and

Areas within 100 feet from the inner gorge of ephemeral or intermittent stream channels. (See Approved RMPA Glossary for definition of inner gorge.)

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Purpose: To maintain the vegetative, hydrologic, and geomorphic functionality of stream channels, water quality characteristics, spring function, water well integrity, proper wetland/riparian function, aquatic health, aquatic and wetland habitat, macroinvertebrate communities, downstream fisheries and natural sediment and salt processes.

Exception: An exception may be granted by the Authorized Officer to the avoidance of these areas if an environmental analysis determines that the proposed activity would not or if the activity could be conditioned so as to not degrade the resources identified (see the modification criteria below). The Authorized Officer may authorize surface disturbance and occupation in identified areas when avoidance would result in the degradation of off-site resources to an extent that contravenes the BLM management direction or objectives, provided that adverse effects to water resources are satisfactorily resolved by design considerations, engineering, reclamation, and best management practices.

Modification: The stipulation may be modified by the Authorized Officer pending an environmental analysis of site specific information by BLM staff that finds the sites proposed for surface disturbance or occupancy after construction, during operation, and after final abandonment would:

1) Pass the 10-year peak flow event without erosion;

Pass the 25-year peak flow without failed infrastructure;

Pass the 50-year peak flow event without failure (when surface occupancy is planned for greater than 50 years);

Not impede a 100-year peak flow event causing upstream flooding beyond floodplain boundaries;

Not negatively impact springs or water wells, and

Beyond temporary, short-term timeframes would:

Not degrade water quality;

Not compromise, degrade, or forestall attainment of proper wetland/riparian conditions or channel functions;
and

Maintain aquatic health and habitat.

The proposed activity must further not represent a vector for the transmission of aquatic pathogens or invasive/nuisance aquatic organisms, and must include provisions to restore wetland/riparian/floodplain vegetation and stream channel features temporarily impacted by the proposed activity. Modifications may also include the use of timing limitations designed to limit impacts to aquatic, riparian or channel resources (e.g., restrictions on activities during high or low flow conditions or during times that are critical for fish reproduction).

Waiver: None.

EXHIBIT WR-CSU-26
VISUAL RESOURCES, NIGHT SKIES, AND SOUNDSCAPES
WITHIN VRM CLASS II AREAS
CONTROLLED SURFACE USE

Lease Number: <LEASE_NUMBER>

Stipulation: Prior to initiating construction operations, a site-specific Visual Resources Management and Noise Reduction Plan (Plan) must be submitted to the BLM by the operator as a component of the Application for Permit to Drill (BLM Form 3160-3) or Sundry Notice (BLM Form 3160-5) – Surface Use Plan of Operations. The operator shall not initiate surface disturbing activities unless the BLM Authorized Officer has approved the Plan (with conditions, as appropriate).

The Plan must demonstrate to the BLM Authorized Officer's satisfaction how the operator will meet the following performance standards:

In order to retain the existing character of the landscape, all energy development and related activities will be located, designed, constructed, operated, and reclaimed using environmental Best Management Practices so that the development meets VRM Class II objectives within 1 year from initiation of construction. VRM Class II objectives do not apply to workover operations, reclamation operations, or geophysical exploration operations conducted by the lessee taking less than one year to complete. Development, production, and drilling operations lasting more than one year at a location will be designed so that they are integrated into the surrounding landscape and minimize visual contrast to meet VRM Class II standards. This may include the use of practices such as full interim reclamation of roads and pads, vegetative and topographic screening, vegetation preservation, proper siting, minimizing hill cuts, utilization of low profile tanks, the effective use of digital camouflage painting of above ground facilities, using existing disturbance where practical, disguising facilities as ranching structures, and other Best Management Practices to avoid or minimize visual impacts.

Minimize noise using the best available technology such as installation of multi-cylinder pumps, hospital-grade sound reducing mufflers, and placement of exhaust systems to direct noise away from sensitive receptors (e.g., residences, the DNM Visitor's Center/Headquarters, overlooks along Harpers Corner Road, established campgrounds, and sensitive wildlife habitat). The goal for the minimum level of acceptable change will be a 10 db(A) or less increase from ambient background levels. However, at no time should operations exceed Colorado Oil and Gas Conservation Commission 800 Series Rules regarding maximum permissible noise levels at residential/agricultural/rural zones (which currently limit noise levels to between 50 and 55 db(A) at 350 feet from the source).

The lighting component of the Plan should specify the following:

- Number of lights and lumen output of each (minimum number of lights and the lowest luminosity consistent with safe and secure operation of the facility);
- Alternatives to lighting (retro-reflective or luminescent markers in lieu of permanent lighting where feasible);
- Fixture design (lights of the proper design, shielded to eliminate uplight, placed and directed to eliminate light spill and trespass to offsite locations);
- Lamp color temperature (lights of the proper color to minimize night-sky impacts);
- Standard operating procedures (minimization of unnecessary lighting use through alternatives to permanent lighting, such as restricting lighting usage to certain time periods);
- Any activities that may be restricted to avoid night-sky impacts; and

A process for promptly addressing and mitigating complaints about potential lighting impacts. In areas north of Highway 40, the Plan must also be coordinated with the National Park Service, with particular emphasis on views seen from key observation points within Dinosaur National Monument (DNM), along the Harpers Corner Road, and at the Visitor's Center/Headquarters.

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Purpose: To manage lands in a manner to protect view sheds, night skies, and soundscapes within the Dinosaur Trail MLP, with emphasis on those areas in the proximity of Dinosaur National Monument (including the Visitor's Center/Headquarters and Harpers Corner Road).

Exception: The BLM Authorized Officer may grant an exception if it is determined that the action as proposed in the Surface Use Plan of Operation or Master Development Plan would not result in a failure to meet the performance standards above; or, a BLM evaluation, in consultation with the National Park Service, determines that the area is not visible, cannot be heard, and night skies would not be affected as observed from key observation points on the National Monument, including along Harpers Corner Road and near the Visitor Center.

Modification: The stipulation and performance standards identified above may be modified based on negative or positive monitoring results from similar actions on similar sites or increased national, state, or field office performance standards.

Waiver: The BLM Authorized Officer, in consultation with the National Park Service, determines that operations (visual, noise, light) on the entire lease area would not be detectable from Dinosaur National Monument.

EXHIBIT WR-TL-12
BIG GAME SEVERE WINTER RANGE
TIMING LIMITATION

Lease Number: <LEASE_NUMBER>

Stipulation: All defined big game severe winter ranges within the WRFO (see Map 2-7) will be subject to a timing limitation from December 1 through April 30 which will be applied through lease stipulations or as COAs that could extend up to 120 days. Timing limitations will typically be applied regardless of weather conditions (i.e., address of chronic influences).

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Purpose: Timing limitations are intended to reduce the intensity, frequency, and extent of disturbances imposed on animals occupying important seasonal habitats during periods when animals are physiologically or energetically challenged. The behavioral response of animals exposed to these disturbances generally elevates energetic demands (e.g., avoidance movements, elevated metabolism) or reduces foraging efficiency (e.g., disuse of available resources, reduced foraging efficiency) which suppresses animal fitness or reproductive performance. This stipulation includes an exception criterion that is intended to promote the clustering of development activity and thereby reduce the extent of seasonal ranges subject to cumulative and chronic adverse behavioral effects (i.e., harassment, avoidance) attributable to oil and gas development.

Exception: The Authorized Officer may grant an exception for clustered development remaining within the acute and collective thresholds described below (evaluated by total leaseholdings within a GMU). In short, the threshold allowances are a predetermined percentage of each seasonal range within a leaseholding (i.e., listed below). To qualify for timing limitation exceptions, the extent of fluid mineral development activity, as measured by the area encompassed by 200-meter buffers surrounding development features (i.e., routes, pipelines, pads) within a leaseholding, must not exceed the acreage represented by those threshold allowances. For leaseholders that do not choose to participate in clustered development strategies within threshold allowances, exceptions could be granted if:

- An environmental analysis indicates that the proposed action can be conditioned so as not to interfere cumulatively with habitat function or utility, or compromise animal condition within the project vicinity;
- The proponent, BLM, and CPW negotiate mitigation that would satisfactorily offset anticipated impacts to big game seasonal range function or utility; or
- For actions intended to enhance the long term utility or availability of suitable habitat. This latter set of exceptions is intended to be considered in the context of a project's contribution to cumulative effects through project life and not granted as a means of circumventing clustered development strategies that are meant to reduce spatial and temporal exposure of big game to behavioral disturbance.

Acute Thresholds: The area of acute effects are defined by the physical footprint of those concentrated, intensive activities associated with, for example, pad and pipeline construction and well drilling and completion operations buffered by 660 feet on all seasonal ranges.

- 20 percent of deer winter range.
- 15 percent of deer severe winter range.
- 15 percent of deer summer range.
- 20 percent of deer winter concentration area.
- 0 percent of defined Restricted Development Areas.

Collective Thresholds: The area of collective effects include the area of acute effects in addition to all residual and incomplete lease development activities buffered as above, including but not limited to: access corridors, multiple well pads awaiting further drilling or not meeting interim reclamation success criteria, linear ROWs that support vehicle traffic after final reclamation, and facilities receiving frequent visitation (i.e., an average greater than seven vehicle trips per pad per week).

- 20 percent of deer winter range.
- 20 percent of deer severe winter range.
- 20 percent of deer summer range.
- 20 percent of deer winter concentration area.
- 5 percent of defined Restricted Development Areas.

The area of acute effects will be exempt from big game seasonal timing limitations as long as lease development activities are managed to not exceed the threshold allowances for collective and acute effects. Minor work involving lower intensity activity (e.g., installation of production facilities, reclamation) within the area of remaining collective effects would, where practicable, be subject to timing limitations. Construction activity that is unrelated to the exercise of lease rights would continue to be subject to timing limitations as established above. Development activities that may affect adjoining leaseholders' acreage may be assessed against the proponent's threshold allowances. Access or other features and facilities used in common may be prorated by operator.

Adverse effects that exceed either the acute or collective threshold will nullify the timing limitation exemptions and subject all leaseholding development to timing limitations as established above.

Because there is no allowance for acute activity (i.e., 0 percent) in Restricted Development Areas, the manner in which these areas would be managed in the context of the threshold strategies differs from its application elsewhere. In these cases, intensive development activities normally assigned to the "acute" effects category would generally be allowed only during those timeframes outside the period of animal occupation (i.e., similar to traditional application of timing limitations). The accumulation of collective activity would remain subject to a threshold allowance of 5 percent.

Modification: The Authorized Officer may modify the size and time frames of this stipulation if:

- 2) CPW monitoring information indicates that current animal use patterns are inconsistent with dates established for animal occupation;
- 3) The proposed action could be conditioned so as not to interfere with habitat function or utility, or compromise animal condition;
- 4) The proponent, BLM, and CPW agree to mitigation that satisfactorily offsets anticipated impacts to big game fitness, productivity, or habitat condition; or
- 5) For actions intended to enhance the long term utility or availability of suitable habitat.

Waiver: The Authorized Officer may grant a waiver if CPW determines that the lease area is no longer utilized for, or capable of serving as, seasonal habitat for big game.

EXHIBIT WR-TL-14
BIG GAME WINTER RANGE AND WINTER CONCENTRATION AREAS
TIMING LIMITATION

Lease Number: <LEASE_NUMBER>

Stipulation: All defined big game winter range and winter concentration areas(see Map 2-7) will be subject to deferrals of up to 60 days within the period of December 1 through April 30 in stratified zones of seasonal use (refined set of seasonal use timeframes developed in coordination with CPW). Timing limitations will typically be applied regardless of weather conditions (i.e., address of chronic influences).

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Purpose: Timing limitations are intended to reduce the intensity, frequency, and extent of disturbances imposed on animals occupying important seasonal habitats during periods when animals are physiologically or energetically challenged. The behavioral response of animals exposed to these disturbances generally elevates energetic demands (e.g., avoidance movements, elevated metabolism) or reduces foraging efficiency (e.g., disuse of available resources, reduced foraging efficiency) which suppresses animal fitness or reproductive performance. This stipulation includes an exception criterion that is intended to promote the clustering of development activity and thereby reduce the extent of seasonal ranges subject to cumulative and chronic adverse behavioral effects (i.e., harassment, avoidance) attributable to oil and gas development.

Exception: The Authorized Officer may grant an exception for clustered development remaining within the acute and collective thresholds described below (evaluated by total leaseholdings within a GMU). In short, the threshold allowances are a predetermined percentage of each seasonal range within a leaseholding (i.e., listed below). To qualify for timing limitation exceptions, the extent of fluid mineral development activity, as measured by the area encompassed by 200-meter buffers surrounding development features (i.e., routes, pipelines, pads) within a leaseholding, must not exceed the acreage represented by those threshold allowances. For leaseholders that do not choose to participate in clustered development strategies within threshold allowances, exceptions could be granted if:

An environmental analysis indicates that the proposed action can be conditioned so as not to interfere cumulatively with habitat function or utility, or compromise animal condition within the project vicinity;

The proponent, BLM, and CPW negotiate mitigation that would satisfactorily offset anticipated impacts to big game seasonal range function or utility; or

For actions intended to enhance the long term utility or availability of suitable habitat. This latter set of exceptions is intended to be considered in the context of a project's contribution to cumulative effects through project life and not granted as a means of circumventing clustered development strategies that are meant to reduce spatial and temporal exposure of big game to behavioral disturbance.

Acute Thresholds: The area of acute effects are defined by the physical footprint of those concentrated, intensive activities associated with, for example, pad and pipeline construction and well drilling and completion operations buffered by 660 feet on all seasonal ranges.

- 20 percent of deer winter range.
- 15 percent of deer severe winter range.
- 15 percent of deer summer range.
- 20 percent of deer winter concentration area.
- 0 percent of defined Restricted Development Areas.

Collective Thresholds: The area of collective effects include the area of acute effects in addition to all residual and incomplete lease development activities buffered as above, including but not limited to: access corridors, multiple well pads awaiting further drilling or not meeting interim reclamation success criteria, linear ROWs that support vehicle traffic after final reclamation, and facilities receiving frequent visitation (i.e., an average greater than seven vehicle trips per pad per week).

- 20 percent of deer winter range.
- 20 percent of deer severe winter range.
- 20 percent of deer summer range.
- 20 percent of deer winter concentration area.
- 5 percent of defined Restricted Development Areas.

The area of acute effects will be exempt from big game seasonal timing limitations as long as lease development activities are managed to not exceed the threshold allowances for collective and acute effects. Minor work involving lower intensity activity (e.g., installation of production facilities, reclamation) within the area of remaining collective effects would, where practicable, be subject to timing limitations. Construction activity that is unrelated to the exercise of lease rights would continue to be subject to timing limitations as established above. Development activities that may affect adjoining leaseholders' acreage may be assessed against the proponent's threshold allowances. Access or other features and facilities used in common may be prorated by operator.

Adverse effects that exceed either the acute or collective threshold will nullify the timing limitation exemptions and subject all leaseholding development to timing limitations as established above.

Modification: The Authorized Officer may modify the size and time frames of this stipulation if:

1. CPW monitoring information indicates that current animal use patterns are inconsistent with dates established for animal occupation;
2. The proposed action could be conditioned so as not to interfere with habitat function or utility, or compromise animal condition;

3. The proponent, BLM, and CPW agree to mitigation that satisfactorily offsets anticipated impacts to big game fitness, productivity, or habitat condition; or
4. For actions intended to enhance the long term utility or availability of suitable habitat.

Waiver: The Authorized Officer may grant a waiver if CPW determines that the lease area is no longer utilized for, or capable of serving as, seasonal habitat for big game.

**EXHIBIT WR-TL-16
SPECIAL STATUS RAPTOR NESTS
(EXCEPT BALD EAGLES AND FERRUGINOUS HAWKS)
TIMING LIMITATION**

LEASE NUMBER: <LEASE_NUMBER>

Stipulation: Surface disturbing and disruptive activities will not be allowed within 0.5 mile of identified nests of federal endangered, threatened, proposed, and candidate raptor species; Colorado state endangered, threatened, and special-status raptor species; or BLM sensitive raptor species (except bald eagles and ferruginous hawks) from February 1 through August 15 or until fledging and dispersal of young.

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Purpose: To prevent disruptions of nesting raptors that may result in absences of adults sufficient to cause direct or indirect mortality of the eggs or young or the premature departure of young from the nest.

Exception: An exception can be granted if an environmental analysis of the proposed action indicates that nature or conduct of the activity could be conditioned so as not to impair the utility of nest site for current or subsequent nesting activity or occupancy. The Authorized Officer may grant an exception if a nest is unattended or remains unoccupied by May 15 of the project year. An exception may also be granted to this timing limitation by the Authorized Officer consistent with policies derived from federal administration of the Migratory Bird Treaty Act. Section 7 consultation procedures will be instituted in those instances where an exception is being considered that involves a federally listed or proposed species.

Modification: The Authorized Officer may modify the stipulation dates or buffer distances if an environmental analysis indicates that a portion of the area is nonessential to the utility or function of the feature, or that the proposed action could be conditioned so as not to impair the utility of the site for current or subsequent nest activities or occupation. Specifically, the buffer distance applied to burrowing owl nest burrows may be reduced to 0.25 mile where appropriate. The stipulation may also be modified if the proponent, BLM, and where necessary, other affected agencies or interests, negotiate compensation that satisfactorily offsets anticipated impacts to raptor breeding activities and/or habitats. Modifications could also occur if sufficient information is provided that supports the contention that the action would not contribute to the suppression of breeding population densities or the population's production or recruitment regime from a regional perspective. A modification may be granted if the nest has remained unoccupied for a minimum of five years or conditions have changed such that there is no reasonable likelihood of site occupation over a minimum 10 year period. Section 7 consultation procedures will be instituted in those instances where a modification is being considered that involves a federally listed or proposed species.

Waiver: The Authorized Officer may grant a waiver if conditions have changed such that there is no reasonable likelihood of further nesting activity within the lease area. Section 7 consultation procedures will be instituted in those instances where a waiver is being considered that involves a federally listed or proposed species.

EXHIBIT WR-TL-22
SAGE-GROUSE IMPORTANT WINTER USE AREAS
TIMING LIMITATION

Lease Number: <LEASE_NUMBER>

Stipulation: Surface disturbing and disruptive activities will be prohibited from December 1 through March 15 in those areas most currently defined by CPW as serving important winter use functions for sage-grouse. This stipulation is intended to apply to construction, drilling, fracing, and completion activities, but may apply, where practicable, to routine or non-emergency operation, maintenance, and production activities that can be scheduled and conducted to reduce or prevent disruption of winter use distribution and behaviors of sage-grouse.

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Purpose: To reduce disruption of important winter-use functions with the overall objective of expanding the distribution and promoting recovery of greater sage-grouse populations in the WRFO. This stipulation includes an exception criterion that is intended to promote the clustering of development activity and thereby confine and limit the extent of suitable habitat adversely influenced at any given time.

Exception: The Authorized Officer may grant an exception under the following circumstances:

1. An environmental analysis and consultation with CPW indicates that the proposed action could be conditioned so as not to contribute to elevated energetic demands on birds or displace birds from favored forage and cover areas;
2. The proponent, BLM, and CPW negotiate compensation that would satisfactorily offset the anticipated losses of winter habitat;
3. For actions designed to enhance the long term utility or availability of suitable winter habitat; or
4. Clustering of development so that the extent of sage-grouse habitat subject to cumulative adverse habitat and behavioral effects (defined below) attributable to oil and gas development within a lease/unit holding in a defined sage-grouse population/subpopulation area would not exceed any of the following thresholds:
 - a. 10 percent of suitable habitat within most-currently mapped Priority Habitat (or equivalent habitat classification system adopted by CPW and BLM); and
 - b. 20 percent of suitable habitat within most-currently mapped General Habitat.

The first three exceptions are intended to be considered in the context of a project's contribution to cumulative effects through project life and not granted as a means of circumventing clustered development strategies that are meant to reduce spatial and temporal exposure of sage-grouse to behavioral disturbance. Threshold strategies and TL exceptions may not be offered in instances (e.g., exploratory, obligation wells, routine and non-emergency production, maintenance, and operation activities) where fluid mineral development activity can be reasonably scheduled to avoid interfering with important seasonal use activities of sage-grouse. The extent of adverse behavioral effects is defined by collective development activity buffered by 660 feet, in addition to any habitat parcels that become physically or behaviorally isolated by development features and are unavailable for effective use by sage-grouse (e.g., impediments to movement and use). Development activity includes, but is not limited to:

construction, drilling, and completion operations; trunk and gathering pipeline construction and reclamation; access routes; wells receiving frequent visitation (i.e., average of more than seven vehicle trips per pad per week); and well pads not fully developed or reclaimed to established WRFO reclamation standards (interim or final, as appropriate).

Reclaimed habitat that does not meet minimum functional habitat properties would be assessed against the threshold. Reclamation success on sage-grouse habitats would be contingent on evidence of successful establishment of desired sagebrush forms on disturbed acreage or achieving minimum functional capacity to serve sage-grouse cover and forage needs. Reclamation assessments would consider site capability and seasonal habitat use, and may allow for surrogate (e.g., herbaceous) forms of cover, where appropriate, per Appendix A, "Structural Habitat Guidelines" from Colorado Greater Sage-grouse Conservation Plan. (Note: Sage-grouse thresholds will be considered separately but will also be integral with more expansive big game thresholds.)

Modification: The Authorized Officer may modify the size or dates of the timing limitation area if site-specific information and ensuing environmental analysis indicates that the proposed action could be conditioned or conducted so as not to contribute cumulatively to adverse effects on the condition or distribution of wintering birds, winter use behaviors, or sustained fidelity to and occupation of birds within the area influenced by development activity. A modification may also be granted if the proponent, BLM, CPW, and other appropriate regulatory entities, devise a mutually acceptable compensation or operating plan that would satisfactorily offset or reduce the anticipated loss of winter use habitat or activities. The BLM would encourage the voluntary application of this strategy to private holdings. Acreage on fee land holdings below the occupied habitat threshold that are considered by CPW to be of comparable or higher sage-grouse value could be substituted for federally administered acreage with the approval of the WRFO Authorized Officer.

Waiver: The Authorized Officer may grant a waiver if BLM in cooperation with the CPW and other appropriate regulatory entities determine that the described lands are incapable of serving the long term requirements of sage-grouse winter habitat and that these ranges no longer warrant current or future consideration as components of sage-grouse habitat.

**EXHIBIT WR-LN-09
PRAIRIE DOG TOWNS
LEASE NOTICE**

Lease Number: <LEASE_NUMBER>

Lease Notice: Lands within this lease parcel involve prairie dog ecosystems that constitute potential habitat for wild or reintroduced populations of the federally endangered black-footed ferret. Conservation and recovery efforts for the black-footed ferret are authorized by the Endangered Species Act of 1973 (as amended). The successful lessee may be required to perform special conservation measures prior to and during lease development. These measures may include one or more of the following:

Participating in the preparation of a surface use plan of operations with BLM, FWS, and CPW, which will be expected to integrate and coordinate long term lease development with measures necessary to minimize adverse impacts to black-footed ferrets or their habitat;

Abiding by special daily and seasonal activity restrictions on construction, drilling, product transport, and service activities;

Incorporating special modifications to facility siting, design, construction, and operation; and/or

Providing in-kind compensation for habitat loss and/or displacement (e.g., special on site rehabilitation/revegetation measures or off-site habitat enhancement).

On the following lands described below:

<LEGAL_DESCRIPTIONS>

**EXHIBIT WR-LN-12
PALEONTOLOGICAL VALUES
LEASE NOTICE**

Lease Number: <LEASE_NUMBER>

Lease Notice: An on-the-ground survey will be required prior to approval of any surface disturbing activities to avoid resource bearing strata for PFYC Class 4 and 5 formations. Mitigation may be required upon the discovery of any vertebrate fossil or other scientifically-important paleontological resource. Mitigation of scientifically important paleontological resources may include avoidance, monitoring, collection, excavation, or sampling. Mitigation of discovered scientifically important paleontological resources might require the relocation of the disturbance over 330 feet. This and any subsequent mitigation work shall be conducted by a BLM-permitted paleontologist. The lessee shall bear all costs for inventory and mitigation (WO IM-2009-011). Exceptions to the survey requirement in these areas could be granted in areas having vertical to near vertical (i.e., unsafe) slopes, areas of soil development, and areas covered with much vegetation, as these areas will be unlikely to produce recoverable fossils. For larger projects, an on-the-ground survey sample may be required of some likely fossiliferous PFYC Class 3 areas.

On the following lands described below:

<LEGAL_DESCRIPTIONS>

**EXHIBIT LS-NSO-09
WILD HORSE WATER SOURCES
NO SURFACE OCCUPANCY**

Lease Number: <LEASE_NUMBER>

Stipulation: No drilling or development operations will be permitted within a 1-mile radius from wild horse water sources from March 1 to December 1. No oil- and gas- related helicopter or motor vehicle use will be allowed in the wild horse HMA during foaling season, which runs from March 1- June 30.

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Exception, Modification, Waiver: Refer to the Little Snake Record of Decision and Approved Resource Management Plan, Appendix B: Procedures and Criteria for Granting Exception, Modification or Waiver; pp. B-15 to B-18, October 2011.

**EXHIBIT LS-NSO-105
PERENNIAL WATER
NO SURFACE OCCUPANCY**

Lease Number: <LEASE_NUMBER>

Stipulation: No surface occupancy for up to 0.25 mile from perennial water sources, if necessary, depending on type and use of the water source, soil type, and slope steepness.

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Exception, Modification, Waiver: Refer to the Little Snake Record of Decision and Approved Resource Management Plan, Appendix B: Procedures and Criteria for Granting Exception, Modification or Waiver; pp. B-15 to B-18, October 2011.

EXHIBIT LS-NSO-106
RAPTOR NEST SITES (GOLDEN EAGLE, OSPREY, ALL ACCIPITER, FALCONS
[EXCEPT THE KESTREL], BUTEOS, AND OWLS, NOT INCLUDING SPECIAL
STATUS SPECIES RAPTORS)
NO SURFACE OCCUPANCY

Lease Number: <LEASE_NUMBER>

Stipulation: No surface occupancy will be allowed within a 0.25 mile radius of raptor nest sites. The NSO area could be altered depending upon the active status of the nest site or upon the geographical relationship of topographical barriers and vegetation screening to the nest site.

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Exception, Modification, Waiver: Refer to the Little Snake Record of Decision and Approved Resource Management Plan, Appendix B: Procedures and Criteria for Granting Exception, Modification or Waiver; pp. B-15 to B-18, October 2011.

LS-NSO-118
COLUMBIAN SHARP-TAILED GROUSE LEK SITES
NO SURFACE OCCUPANCY

Lease Number: <LEASE_NUMBER>

Stipulation: No surface occupancy (NSO) will be allowed within a 0.25 mile radius of a Columbian sharp-tailed grouse lek site. The NSO area may be altered depending upon the active status of the lek or the geographical relationship of topographical barriers and vegetation screening to the lek site.

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Exception, Modification, Waiver: Refer to the Little Snake Record of Decision and Approved Resource Management Plan, Appendix B: Procedures and Criteria for Granting Exception, Modification or Waiver; pp. B-15 to B-18, October 2011.

EXHIBIT LS-CSU-107
MEDIUM PRIORITY SAGE BRUSH HABITATS
CONTROLLED SURFACE USE

Lease Number: <LEASE_NUMBER>

Stipulation:

Existing Leases

For existing oil and gas leases at the time of the Record of Decision (ROD), participation in this approach will be voluntary. A valid existing lease conveys certain rights of development to the leaseholder. A stipulation cannot be added to an existing lease after the lease is issued. Oil and gas operators could opt into an agreement to limit surface disturbance to 5 percent of the project area and submit a Plan of Development (POD) which illustrates a strategy to keep large blocks of habitat undeveloped. In return, BLM will grant exceptions to big game and sage-grouse timing limitation stipulations, allowing larger windows for development (drilling, completions and construction). If a proposal and/or operator meets both criteria, BLM will grant an exception to big game winter range and sage-grouse nesting and critical winter range timing stipulations for all applications for permits to drill (APDs) in the project area (as described below), allowing a larger window for development. Until these criteria are met, timing limitation stipulations will apply as stated on leases. This agreement does not pertain to the NSO stipulation around sage-grouse leks or timing stipulations for raptors and other species, which will remain in effect. For these stipulations, as well as stipulations on leases which are not subject to this voluntary agreement, BLM could grant exceptions, modifications, or waivers through normal procedures. The agreement must be adhered to for the life of the leases in the project area.

Approval of exceptions to big game and sage-grouse timing limitation stipulations for year round drilling will require active monitoring for compliance with the conditions of approval outlined in the voluntary agreement. Operators must continually meet these criteria throughout development of the project area, or the authorization for the exception of timing stipulations will terminate. Compliance history will be a factor in approving this tradeoff for future development. If an operator were to breach the agreement, BLM will not allow the same operator to enter into this agreement again.

For operators who choose not to opt into this voluntary approach in medium potential habitats, BLM will require habitat protection best management practices (BMPs). Appropriate BMPs will be required as Conditions of Approval (COAs) on drilling applications on existing leases within medium priority habitats not enrolled in a voluntary surface disturbance limiting agreement. BMPs could include, but will not be limited to, the practices listed in Section 2.6 (special status species management).

New Leases

For any new leases which overlie a medium priority habitat, a stipulation will be attached to the lease to comply with the two criteria described in more detail below: a 5 percent disturbance limitation and a POD illustrating a strategy to leave large blocks of undisturbed habitat. These criteria will be mandatory and BLM will not be obligated to grant an operator an exception to

timing limitation stipulations. Operators will have to apply for an exception to this stipulation, which BLM will consider on a case-by-case basis.

Defining the project area boundary

Where the surface disturbance stipulation is voluntary, the operator will define the project boundary. An operator is allowed a lot of flexibility in defining the project area. The only requirement is that they control the oil and gas development within the area so that they are able to meet the necessary criteria without interference from other operators. A project boundary could be composed of as little as one lease, or as much as several leases under different operators, or even a federal oil and gas unit. The leases within the project area could either be connected or not contiguous. The project area could be composed of a mixture of federal and private surface.

The total allowable surface disturbance will be calculated for the entire project area. For example, a project boundary of 1,000 acres will allow 50 acres of disturbance regardless of the size of the leases in the project area. A project area could be composed of medium and high priority habitats. In this case, allowable disturbance in the two different types will be calculated separately. For example, a 1,000 acre project area with 500 acres medium priority habitat and 500 acres high priority habitat, no more than 25 acres of medium priority habitat and 5 acres of high priority habitat could be disturbed at one time. When calculating total acres in a project area, all leased lands will be included, including areas with NSO stipulations. For example, if there are 200 acres covered by an NSO stipulation for sage-grouse in a 1,000 acre project area, the total project area will be 1,000 acres, not 800. It is not necessary for one leaseholder to hold all leases in a project area. In the case of the project area being defined by a federal oil and gas unit, the lead operator will be responsible for coordinating the oil and gas development so the criteria are met. Outside of established units, but within landscapes with multiple leaseholders, multiple operators could enter into this approach together, coordinating development together to ensure meeting the criteria within the project area. Development will have to be organized so that one operator cannot utilize all allowable disturbance acreage for the project area.

Larger project areas will benefit both the operator and the wildlife resource. Large project areas will allow operators more flexibility in remaining below the disturbance threshold, as there will be more acres available to disturb. Likewise, larger project areas will facilitate larger sage-grouse sanctuaries and better create habitat protection on a landscape scale.

For new leases where this approach is mandatory, the operator could suggest a project area boundary to BLM for approval, which could include existing leases. If the operator does not have a specific project area in mind, compliance with established criteria will be required for the boundary of the new lease.

Below are the two criteria that an operator must meet when entering into a voluntary agreement or complying with a mandatory stipulation in medium priority habitats.

Criterion #1 for Medium Priority Habitats

No more than 5 percent of the surface area of the project area will be disturbed at any time. In this context, surface disturbance pertains to only oil and gas actions. Other BLM permitted activities, nonpermitted activities, and non-oil and gas related rights of way (ROWs) do not count toward the 5 percent maximum. Oil and gas related ROWs that are owned by a third party also do not count toward the 5 percent limit; only actions that the leaseholder is responsible for

are included in the total. All disturbances associated with oil and gas operations performed by the leaseholder, however, do count toward this limitation, including well pads, roads, pipelines, exploration and production facilities, and all other infrastructure. In addition, existing oil and gas disturbance also counts toward the 5 percent threshold. In this context, “existing disturbance” means areas where vegetation has been stripped or otherwise removed or destroyed, and for which revegetation has not been initiated, or has not achieved reclamation success standards. For project areas already exceeding 5 percent oil and gas-related disturbance, a no-net-gain principle would go into effect, which is described below.

Although the 5 percent surface disturbance threshold is the guiding factor, spacing of oil and gas facilities on the surface is also an important concept in limiting habitat fragmentation. If it is assumed that each facility occupies 8 acres, this is equivalent to disturbing 5 percent of a 160-acre block. The intent is not to require 160-acre spacing but to average no more than one facility for each 160 acres within a project area while leaving large blocks of habitat undisturbed. Therefore, operators are encouraged to develop proposals that leave larger blocks of sagebrush habitat undisturbed within project areas, by clustering facilities, carefully designing road and pipeline systems to minimize disturbance, or other means.

Disturbed areas can be recovered on a rolling-reclamation basis. Upon successful reclamation, reclaimed areas will no longer be counted toward the 5 percent limit, and the total area disturbed in the project area will be decreased by that amount. Successful reclamation is defined in the Reclamation Performance Standard described in ROD Appendix C. The criteria used to evaluate whether the reclamation performance standard is met will depend on whether the reclamation is interim or final.

In areas where existing oil and gas infrastructure already exceeds the 5 percent disturbance threshold, a no-net-gain principle will be employed. A leaseholder could satisfy this criterion if it can show in a POD that it will reclaim areas equal to the area proposed for new development and meet the performance standard for successful reclamation in those areas. In-kind offsite or compensatory mitigation could also count toward recuperating disturbed areas, if approved by BLM, although it may not necessarily be on a one-acre per one-acre basis. Reclamation and offsite mitigation will be required to meet the same reclamation performance standard as described above. If mitigation is not performed as agreed upon, or any aspect of the POD is not followed, BLM will no longer grant exceptions to timing stipulations and will issue noncompliance to the leaseholder.

Criterion #2 for Medium Priority Habitats

Development and approval of a POD, which contains a strategy for reducing habitat fragmentation and maintaining large blocks of sagebrush habitat, is an important requirement in this approach. The operator needs to have some level of confidence and certainty in their POD. PODs may be developed in stages and updated annually (see the discussion on Maintaining the Project Record below). The area of the project described in the POD could include multiple leases or units, either connected or not contiguous. However, BLM or the operator may determine that separate PODs are needed for areas that are not connected.

A complete POD consists of the following components, if applicable:

- Cover letter containing operator name, project name, list of wells (name and number by lease, with legal description including quarter-quarter)
- Master drilling plan
- Master surface use plan, including plans for surface reclamation, a baseline calculation of total surface area currently disturbed by oil and gas activity in the project area, and the total area to be disturbed through the proposed development
- A strategy for limiting and/or mitigating sagebrush habitat fragmentation with the goal of maintaining large, unfragmented blocks of sagebrush habitat. The plan will demonstrate significant control of fragmentation in a number of ways, including:

- o Reducing surface density of facilities, roads, pipelines, and other ROWs
- o Focusing development near existing ROWs
- o Clustering facilities, including the use of directional drilling where feasible and utilizing closed drilling systems (no reserve pits)
- o Minimizing oil- and gas-related activity in sagebrush habitats, including reducing traffic through field road management, closing roads to public use, remote telemetry of wells, piping of produced fluids rather than trucking, etc.
- o Using new technologies, including surface mats, self-contained rigs, limited impact drilling (e.g., small roads and small pads)
- o Being sensitive to different habitat types within the project area and developing a strategy that protects important habitat types. Operators should consider seasonal habitats and guide development away from important breeding, summer, fall and winter habitats. Mitigation plans, compensatory mitigation proposals
- o Acceptance of applicable BMPs
 - Water management plan
 - Cultural resource inventory plan
 - Wildlife monitoring plan
 - Project maps, including:
- o Surface ownership with project boundary
- o Mineral ownership with project boundary
- o Existing and proposed well sites
- o Compressor sites
- o Flow line routes
- o Utility line routes
- o Transportation routes
 - List of all permitting agencies involved
 - Surface owner agreements

- Water mitigation agreements
- Any additional information

Maintaining the Project Record: Baseline Measurements, Monitoring, and Updating PODs

This approach requires a baseline measurement of existing disturbance as well as monitoring to determine when the 5 percent or 1 percent threshold is reached. Before a leaseholder enters into the agreement, a geographic information system (GIS) analysis of existing disturbance in the project area will be performed by the operator as part of the POD. Operators will provide BLM with Federal Geographic Data Committee-compliant metadata and GIS data for all existing oil and gas related disturbance. Using global positioning system (GPS) on the ground or digitizing disturbance from satellite imagery are two possible methods to compile a baseline disturbance map. The total number of acres of existing disturbance in the project area will be calculated by the operator. Portions of the project area will be ground-truthed by BLM to ensure accuracy.

A running total of surface disturbance in the project area will be performed by the operator and updated in the POD at least annually. Annual meetings between BLM and the operator will be required to maintain a project record. A draft POD will be required for BLM review prior to annual planning meetings. A final POD, based on comments and discussion during the annual planning meeting, will be submitted within a reasonable timeframe thereafter.

During an annual meeting or in another forum, the proposed POD will be reviewed and recommendations will be made to ensure that the measures laid out will effectively protect sagebrush and big game habitat. Additionally, a running total of surface disturbance in the project area, including anticipated development for that year, will be performed by the operator and included in the POD. The operator will be required to supply an annual reclamation status report and plan for all disturbances in the project area so that BLM could assess reclamation success. BLM and the operator could take the following day, or another time, to ground-truth the scope of the proposed development and review reclaimed areas to see if they have met the reclamation requirements described.

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Exception, Modification, Waiver: Refer to the Little Snake Record of Decision and Approved Resource Management Plan, Appendix B: Procedures and Criteria for Granting Exception, Modification or Waiver; pp. B-15 to B-18, October 2011.

**EXHIBIT LS-CSU-108
HIGH PRIORITY SAGEBRUSH HABITATS
CONTROLLED SURFACE USE**

Lease Number: <LEASE_NUMBER>

Stipulation:

Existing Leases

For existing oil and gas leases at the time of the ROD, participation in this approach will be voluntary. If an operator chose to opt into an agreement, they will have to develop a plan which keeps surface disturbance below 5 percent and creates large refuges of undeveloped habitat. As an incentive to enter into this approach, BLM will grant exceptions to big game and sage-grouse timing limitation stipulations, allowing larger windows for development (drilling, completions and construction). If a proposal and/or operator meets both criteria, BLM will grant an exception to big game winter range and sage-grouse nesting and critical winter range timing stipulations for all APDs in the project area (as described below), allowing a larger window for development. Until these criteria are met, timing limitation stipulations will apply as stated on leases. This agreement does not pertain to the NSO stipulation around sage-grouse leks or timing stipulations for raptors and other species, which will remain in effect. For these stipulations, as well as stipulations on leases which are not subject to this voluntary agreement, BLM could grant exceptions, modifications, or waivers through normal procedures. The agreement must be adhered to for the life of the leases in the project area.

Approval of exceptions to big game and sage-grouse timing limitation stipulations for year-round drilling will require active monitoring for compliance with the conditions of approval outlined in the voluntary agreement. Operators must continually meet these criteria throughout development of the project area, or the authorization for the exception of timing stipulations will terminate. Compliance history will be a factor in approving this tradeoff for future development. If an operator were to breach the agreement, BLM will not allow the same operator to enter into this agreement again.

For operators who choose not to opt into this voluntary approach in medium potential habitats, BLM will require habitat protection BMPs. Appropriate BMPs will be required as COAs on drilling applications on existing leases within medium priority habitats not enrolled in a voluntary surface disturbance limiting agreement. BMPs could include, but will not be limited to, the practices listed in Section 2.6 (special status species management).

High Priority Habitats, New Leases

For new leases within high priority habitat, a lease stipulation will be attached to comply with the two criteria: a 1 percent disturbance limitation and a POD illustrating a strategy to leave large blocks of undisturbed habitat. These criteria will be mandatory and BLM will not be obligated to

grant an exception to timing limitation stipulations. Operators will have to apply for an exception to this stipulation, which BLM will consider on a case-by-case basis. To grant an exception to the 1 percent disturbance threshold, the operator will have to prove that it went to extraordinary means to mitigate or improve high priority habitats. This could include enlisting surrounding leaseholders into a plan to protect even larger blocks of habitat, or performing BLM-approved compensatory mitigation.

The two criteria that an operator must meet when entering into a voluntary agreement or complying with a mandatory stipulation in high priority habitats are similar to those for medium potential habitats.

Criterion #1 for High Priority Habitats

No more than 1 percent of the surface area of the project area will be disturbed at any time. In this context, surface disturbance pertains to only oil and gas actions. Other BLM permitted activities, nonpermitted activities, and non-oil and gas related ROWs do not count toward the 1 percent maximum. Oil and gas related ROWs that are owned by a third party also do not count toward the 1 percent limit; only actions that the leaseholder is responsible for are included in the total. All disturbances associated with oil and gas operations performed by the leaseholder, however, do count toward this limitation, including well pads, roads, pipelines, exploration and production facilities, and all other infrastructure. In addition, existing oil and gas disturbance also counts toward the 1 percent threshold. In this context, “existing disturbance” means areas where vegetation has been stripped or otherwise removed or destroyed, and for which revegetation has not been initiated, or has not achieved reclamation success standards. For project areas already exceeding 1 percent oil and gas-related disturbance, a no-net-gain principle would go into effect, which is described below.

Although the 1 percent surface disturbance threshold is the guiding factor, spacing of oil and gas facilities on the surface is also an important concept in limiting habitat fragmentation. If it is assumed that each facility occupies 8 acres, this is equivalent to disturbing 1 percent of an 800-acre block. The intent is not to require 800-acre spacing but to average no more than one facility for each 800 acres within a project area while leaving large blocks of habitat undisturbed. Therefore, operators are encouraged to develop proposals that leave larger blocks of sagebrush habitat undisturbed within project areas, by clustering facilities, carefully designing road and pipeline systems to minimize disturbance, or other means.

Disturbed areas can be recovered on a rolling-reclamation basis. Upon successful reclamation, reclaimed areas will no longer be counted toward the 1 percent limit, and the total area disturbed in the project area will be decreased by that amount. Successful reclamation is defined in the Reclamation Performance Standard described in ROD Appendix C. The criteria

used to evaluate whether the reclamation performance standard is met will depend on whether the reclamation is interim or final.

In areas where existing oil and gas infrastructure already exceeds the 1 percent disturbance threshold, a no-net-gain principle will be employed. A leaseholder could satisfy this criterion if it can show in a POD that it will reclaim areas equal to the area proposed for new development and meet the performance standard for successful reclamation in those areas. In-kind offsite or compensatory mitigation could also count toward recuperating disturbed areas, if approved by BLM, although it may not necessarily be on a one-acre per one-acre basis. Reclamation and offsite mitigation will be required to meet the same reclamation performance standard as described above. If mitigation is not performed as agreed upon, or any aspect of the POD is not followed, BLM will no longer grant exceptions to timing stipulations and will issue noncompliance to the leaseholder.

Criterion #2 for High Priority Habitats

A POD which puts forward a strategy for limiting and/or mitigating sagebrush habitat fragmentation with the goal of maintaining large, unfragmented blocks of sagebrush habitat will be a requirement for high priority habitats. This requirement is described below, with an emphasis that BLM will look for a more measures to protect these critical communities. The operator needs to have some level of confidence and certainty in their POD. PODs may be developed in stages and updated annually (see the discussion on *Maintaining the Project Record* below). The area of the project described in the POD could include multiple leases or units, either connected or not contiguous. However, BLM or the operator may determine that separate PODs are needed for areas that are not connected.

A complete POD consists of the following components, if applicable:

Cover letter containing operator name, project name, list of wells (name and number by lease, with legal description including quarter-quarter)

Master drilling plan

Master surface use plan, including plans for surface reclamation, a baseline calculation of total surface area currently disturbed by oil and gas activity in the project area, and the total area to be disturbed through the proposed development

A strategy for limiting and/or mitigating sagebrush habitat fragmentation with the goal of maintaining large, unfragmented blocks of sagebrush habitat. The plan will demonstrate significant control of fragmentation in a number of ways, including:

- Reducing surface density of facilities, roads, pipelines, and other ROWs
- Focusing development near existing ROWs

- Clustering facilities, including the use of directional drilling where feasible and utilizing closed drilling systems (no reserve pits)
- Minimizing oil- and gas-related activity in sagebrush habitats, including reducing traffic through field road management, closing roads to public use, remote telemetry of wells, piping of produced fluids rather than trucking, etc.
- Using new technologies, including surface mats, self-contained rigs, limited impact drilling (e.g., small roads and small pads)
- Being sensitive to different habitat types within the project area and developing a strategy that protects important habitat types. Operators should consider seasonal habitats and guide development away from important breeding, summer, fall and winter habitats. Mitigation plans, compensatory mitigation proposals
- Acceptance of applicable BMPs

Water management plan

Cultural resource inventory plan

Wildlife monitoring plan

Project maps, including:

- Surface ownership with project boundary
- Mineral ownership with project boundary
- Existing and proposed well sites
- Compressor sites
- Flow line routes
- Utility line routes
- Transportation routes

List of all permitting agencies involved

Surface owner agreements

Water mitigation agreements

Any additional information

Maintaining the Project Record: Baseline Measurements, Monitoring, and Updating PODs

This approach requires a baseline measurement of existing disturbance as well as monitoring to determine when the 5 percent or 1 percent threshold is reached. Before a leaseholder enters into the agreement, a GIS analysis of existing disturbance in the project area will be performed by the operator as part of the POD. Operators will provide BLM with Federal Geographic Data Committee-compliant metadata and GIS data for all existing oil and gas related disturbance. Using GPS on the ground or digitizing disturbance from satellite imagery are two possible methods to compile a baseline disturbance map. The total number of acres of existing disturbance in the project area will be calculated by the operator. Portions of the project area will be ground-truthed by BLM to ensure accuracy.

A running total of surface disturbance in the project area will be performed by the operator and updated in the POD at least annually. Annual meetings between BLM and the operator will be required to maintain a project record. A draft POD will be required for BLM review prior to annual planning meetings. A final POD, based on comments and discussion during the annual planning meeting, will be submitted within a reasonable timeframe thereafter.

During an annual meeting or in another forum, the proposed POD will be reviewed and recommendations will be made to ensure that the measures laid out will effectively protect sagebrush and big game habitat. Additionally, a running total of surface disturbance in the project area, including anticipated development for that year, will be performed by the operator and included in the POD. The operator will be required to supply an annual reclamation status report and plan for all disturbances in the project area so that BLM could assess reclamation success. BLM and the operator could take the following day, or another time, to ground-truth the scope of the proposed development and review reclaimed areas to see if they have met the reclamation requirements described in ROD Appendix C. Proposals for compensatory mitigation could also be discussed.

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Exception, Modification, Waiver: Refer to the Little Snake Record of Decision and Approved Resource Management Plan, Appendix B: Procedures and Criteria for Granting Exception, Modification or Waiver; pp. B-15 to B-18, October 2011.

**EXHIBIT LS-CSU-111
SLOPES GREATER THAN 35 PERCENT
CONTROLLED SURFACE USE**

Lease Number: <LEASE_NUMBER>

Stipulation: Before surface disturbance on slopes of 35 percent or greater, an engineering or reclamation plan must be approved by the authorized officer. Controlled Surface Use (CSU) stipulations may be accepted subject to an onsite impact analysis. CSU stipulations will not be applied when the authorized officer determines that relocation up to 200 meters can be applied to protect the riparian system during well siting. Before surface disturbance on slopes of 35 percent or greater, an engineering or reclamation plan must be approved by the authorized officer. Controlled Surface Use (CSU) stipulations may be accepted subject to an onsite impact analysis. CSU stipulations will not be applied when the authorized officer determines that relocation up to 200 meters can be applied to protect the riparian system during well siting.

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Exception, Modification, Waiver: Refer to the Little Snake Record of Decision and Approved Resource Management Plan, Appendix B: Procedures and Criteria for Granting Exception, Modification or Waiver; pp. B-15 to B-18, October 2011.

EXHIBIT LS-CSU-129
ACTIVE WHITE-TAILED PRAIRIED DOG TOWNS LESS THAN 10 ACRES
CONTROLLED SURFACE USE STIPULATION

Lease Number: <LEASE_NUMBER>

Stipulation: Surface disturbing activities occurring over more than 1 acre will not be permitted in active prairie dog towns less than 10 acres in size. These activities will be relocated to the edge of the active prairie dog town.

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Exception, Modification, Waiver: Refer to the Little Snake Record of Decision and Approved Resource Management Plan, Appendix B: Procedures and Criteria for Granting Exception, Modification or Waiver; pp. B-15 to B-18, October 2011.

EXHIBIT LS-CSU-130
SPECIAL STATUS SPECIES HABITAT
CONTROLLED SURFACE USE

Lease Number: <LEASE_NUMBER>

Stipulation: Before any surface disturbance activity, surveys will be conducted of potential habitat for Colorado BLM Sensitive Species, including plants and wildlife. Should any such species be found, all disruptive activities will be halted until species-specific protective measures are developed and implemented. There will be CSU stipulations on habitat areas containing special status species, such as federally listed, proposed, and candidate species.

BLM will also survey for rare plant species, and if any such communities were found, all disruptive activities will be delayed until specific protective measures are developed and implemented, if appropriate.

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Exception, Modification, Waiver: Refer to the Little Snake Record of Decision and Approved Resource Management Plan, Appendix B: Procedures and Criteria for Granting Exception, Modification or Waiver; pp. B-15 to B-18, October 2011.

EXHIBIT LS-CSU-131
ACTIVE WHITE-TAILED PRAIRIE DOG COLONIES WITH THE BLACK-FOOTED FERRET
REINTRODUCTION AREA
CONTROLLED SURFACE USE

Lease Number: <LEASE_NUMBER>

Stipulation: Active white-tailed prairie dog colonies will continue to be avoidance areas for surface disturbing activities within the black-footed ferret reintroduction area.

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Exception, Modification, Waiver: Refer to the Little Snake Record of Decision and Approved Resource Management Plan, Appendix B: Procedures and Criteria for Granting Exception, Modification or Waiver; pp. B-15 to B-18, October 2011.

**EXHIBIT LS-TL-103
RAPTOR NESTING AND FLEDGLING HABITAT
TIMING LIMITATION**

Lease Number: <LEASE_NUMBER>

Stipulation: Raptor nesting and fledgling habitat will be closed to surface disturbing activities from February 1 to August 15 within a 0.25 mile buffer zone around the nest site. However, during years when a nest site is unoccupied, or unoccupied by or after May 15, these seasonal limitations may be excepted. They may also be excepted once the young have fledged and dispersed from the nest.

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Exception, Modification, Waiver: Refer to the Little Snake Record of Decision and Approved Resource Management Plan, Appendix B: Procedures and Criteria for Granting Exception, Modification or Waiver; pp. B-15 to B-18, October 2011.

**EXHIBIT LS-TL-104
COLUMBIA SHARP-TAILED GROUSE CRUCIAL WINTER HABITAT
TIMING LIMITATION**

Lease Number: <LEASE_NUMBER>

Stipulation: Columbian sharp-tailed grouse crucial winter habitat will be closed from December 16 to March 15.

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Exception, Modification, Waiver: Refer to the Little Snake Record of Decision and Approved Resource Management Plan, Appendix B: Procedures and Criteria for Granting Exception, Modification or Waiver; pp. B-15 to B-18, October 2011.

**EXHIBIT LS-TL-112
COLUMBIAN SHARP-TAILED GROUSE NESTING HABITAT
TIMING LIMITATION**

Lease Number: <LEASE_NUMBER>

Stipulation: Columbian sharp-tailed grouse nesting habitat will be closed to surface disturbing activities from March 1 to June 30.

On the following lands described below:
<LEGAL_DESCRIPTIONS>

Exception, Modification, Waiver: Refer to the Little Snake Record of Decision and Approved Resource Management Plan, Appendix B: Procedures and Criteria for Granting Exception, Modification or Waiver; pp. B-15 to B-18, October 2011.

**EXHIBIT LS-TL-114
ACTIVE WHITE-TAILED PRAIRIE DOG TOWNS
TIMING LIMITATION**

Lease Number: <LEASE_NUMBER>

Stipulation: Surface disturbing activities occurring over more than 1 acre will not be permitted in active prairie dog towns less than 10 acres in size. These activities will be relocated to the edge of the active prairie dog town. To protect prairie dog pups, surface disturbing activities will not be permitted in prairie dog towns between April 1 and June 15.

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Exception, Modification, Waiver: Refer to the Little Snake Record of Decision and Approved Resource Management Plan, Appendix B: Procedures and Criteria for Granting Exception, Modification or Waiver; pp. B-15 to B-18, October 2011.

**EXHIBIT LS-TL-115
ELK CALVING AREAS
TIMING LIMITATION**

Lease Number: <LEASE_NUMBER>

Stipulation: Elk calving areas will be closed to surface disturbing activities from April 16 to June 30.

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Exception, Modification, Waiver: Refer to the Little Snake Record of Decision and Approved Resource Management Plan, Appendix B: Procedures and Criteria for Granting Exception, Modification or Waiver; pp. B-15 to B-18, October 2011.

**EXHIBIT LS-TL-136
MULE DEER CRUCIAL WINTER HABITAT
TIMING LIMITATION**

Lease Number: <LEASE_NUMBER>

Stipulation: Crucial winter habitat will be closed to surface disturbing activities from December 1 to April 30, with the intent that this stipulation apply after the big game hunting season. In the case that hunting season extends later, exceptions will be applied through normal procedures.

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Exception, Modification, Waiver: Refer to the Little Snake Record of Decision and Approved Resource Management Plan, Appendix B: Procedures and Criteria for Granting Exception, Modification or Waiver; pp. B-15 to B-18, October 2011.

**EXHIBIT LS-TL-137
ELK CRUCIAL WINTER HABITAT
TIMING LIMITATION**

Lease Number: <LEASE_NUMBER>

Stipulation: Crucial winter habitat will be closed to surface disturbing activities from December 1 to April 30, with the intent that this stipulation apply after the big game hunting season. In the case that hunting season extends later, exceptions will be applied through normal procedures.

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Exception, Modification, Waiver: Refer to the Little Snake Record of Decision and Approved Resource Management Plan, Appendix B: Procedures and Criteria for Granting Exception, Modification or Waiver; pp. B-15 to B-18, October 2011.

**EXHIBIT LS-TL-138
PRONGHORN ANTELOPE WINTER HABITAT
TIMING LIMITATION**

Lease Number: <LEASE_NUMBER>

Stipulation: Crucial winter habitat will be closed to surface disturbing activities from December 1 to April 30, with the intent that this stipulation apply after the big game hunting season. In the case that hunting season extends later, exceptions will be applied through normal procedures.

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Exception, Modification, Waiver: Refer to the Little Snake Record of Decision and Approved Resource Management Plan, Appendix B: Procedures and Criteria for Granting Exception, Modification or Waiver; pp. B-15 to B-18, October 2011.

**EXHIBIT LS-TL-143
FERRUGINOUS HAWK NESTING AND FLEDGLING HABITAT
TIMING LIMITATION**

Lease Number: <LEASE_NUMBER>

Stipulation: From February 1 to August 15, a 1 mile buffer around nesting and fledgling habitat will be closed to surface disturbing activities to avoid nest abandonment.

On the following lands described below:

<LEGAL_DESCRIPTIONS>

Exception, Modification, Waiver: Refer to the Little Snake Record of Decision and Approved Resource Management Plan, Appendix B: Procedures and Criteria for Granting Exception, Modification or Waiver; pp. B-15 to B-18, October 2011.

**EXHIBIT LS-TL-148
WILD HORSES, SAND WASH HMA
TIMING LIMITATION**

Stipulation: No oil- and gas-related helicopter or motor vehicle use will be allowed in the wild horse HMA during foaling season, which runs from March 1 to June 30.

On the following lands described below:

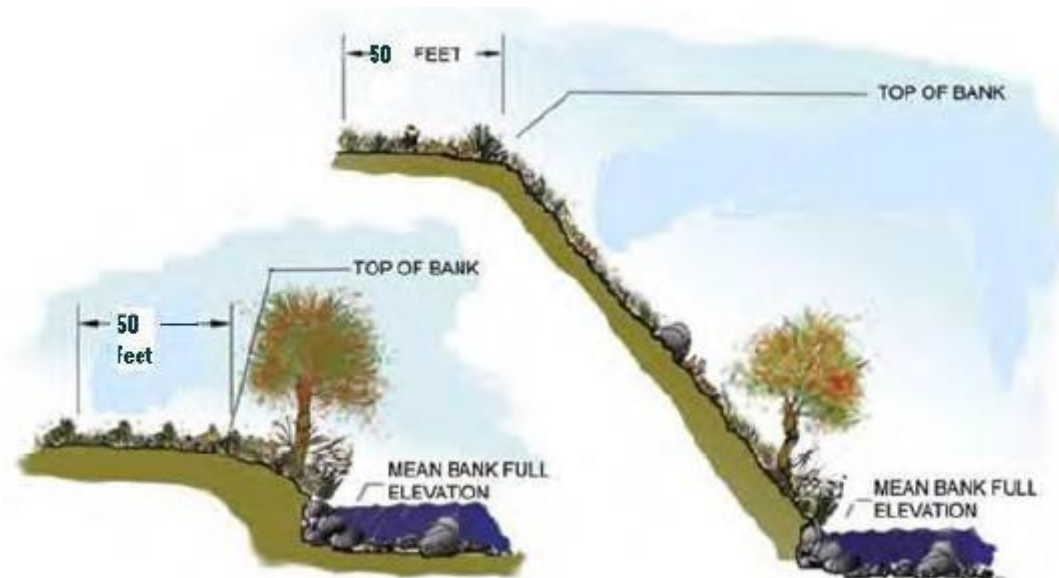
<LEGAL_DESCRIPTIONS>

Exception, Modification, Waiver: Refer to the Little Snake Record of Decision and Approved Resource Management Plan, Appendix B: Procedures and Criteria for Granting Exception, Modification or Waiver; pp. B-15 to B-18, October 2011.

**EXHIBIT KFO-NSO-5
STREAMS INTERMITTENT AND EPHEMERAL
NO SURFACE OCCUPANCY**

Lease Number: <LEASE_NUMBER>

Stipulation: Prohibit surface occupancy or use within 50 horizontal feet, as measured from the top of the stream bank, for all intermittent or ephemeral streams (see diagram). If riparian vegetation extends beyond the top of the stream bank, the buffer will be measured from the extent of the riparian vegetation.



ON THE FOLLOWING LANDS DESCRIBED BELOW:

<LEGAL DESCRIPTIONS>

Purpose: To maintain and protect water quality, stream stability, aquatic health, seasonal use, and downstream fisheries; and sediment processes downstream.

Exception: A one-time exemption from a stipulation for a particular site within the leasehold. Exceptions are determined on a case-by-case basis and, if granted, suspend the restrictions of a stipulation for a specified period, location, or activity. The stipulation continues to apply to other sites in the stipulation area.

Modification: None.

Waiver: None.

EXHIBIT KFO-NSO-19
HIGH VALUE RECREATION AND WILDLIFE HABITAT RESOURCES
NO SURFACE OCCUPANCY

Lease Number: <LEASE_NUMBER>

Stipulation: Prohibit surface occupancy or use on selected State Wildlife Areas (SWAs), as determined by BLM in cooperation with the High Value CPW.

ON THE FOLLOWING LANDS DESCRIBED BELOW:

<LEGAL_DESCRIPTIONS>

Purpose: To protect high value wildlife habitat and recreation values Resources associated with designated SWAs.

Exception: An exception may be granted, or substituted with a TL, by the Field Manager, in coordination with the CPW, if an environmental analysis determines that the action, as proposed or conditioned, will not impair the values of the SWA.

Modification: A modification may be granted by the Field Manager, in coordination with the CPW, if an environmental analysis finds that a portion of the area is non-essential to site utility or function, or that the Proposed Action could be conditioned so as not to impair the current, or future, values of the site. The stipulation may also be modified if the proponent, the CPW, and, where necessary, other affected interests, negotiate compensation that satisfactorily offsets anticipated impacts to the SWA.

Waiver: This stipulation may be waived if the CPW disposes of the site.

**EXHIBIT KFO-CSU-4
INTERMITTENT AND EPHEMERAL STREAMS
CONTROLLED SURFACE USE**

Lease Number: <LEASE_NUMBER>

Stipulation: This CSU shall apply from the edge of NSO buffer to 100 horizontal feet. Minimize locating roads, stream crossings and facilities within this zone (because activities within this area can potentially affect streams). Adequate professional design and engineering of activities in this zone is necessary in order to prevent stormwater runoff and sedimentation. Measurement is from the top of the stream bank; however, if wetland vegetation exists, then the measurement is from the vegetation's edge.

ON THE FOLLOWING LANDS DESCRIBED BELOW:

<LEGAL_DESCRIPTIONS>

Purpose: To minimize the risk of sedimentation, spills, and other contaminants, reaching intermittent and/or ephemeral streams in order to protect water quality, stream function, and aquatic habitat.

Exception: A one-time exemption from a stipulation for a particular site within the leasehold. Exceptions are determined on a case-by-case basis and, if granted, suspend the restrictions of a stipulation for a specified period, location, or activity. The stipulation continues to apply to other sites in the stipulation area.

Modification: A modification is a change to the provisions of a lease stipulation. Modifications may be temporary, or they may be for the term of the lease. Depending upon the specific modification, the stipulation may, or may not, apply to all sites within the leasehold to which the restrictive criteria are applied. Modifications are made if it is determined that the stipulation is no longer required as written (e.g., when it is based upon the results of monitoring data.)

Waiver: Waivers are permanent exemptions to a stipulation. Under a waiver, the stipulation no longer applies anywhere within the leasehold. Waivers apply to an entire stipulation area. They are applied only after preparation of an environmental analysis document, in accordance with the NEPA, and after a subsequent decision has been made that a stipulation is no longer required to protect a specific resource.

**EXHIBIT KFO-CSU-14
PALEONTOLOGICAL (FOSSIL) RESOURCES
CONTROLLED SURFACE USE**

Lease Number: <LEASE_NUMBER>

Stipulation: The lessee is hereby notified that prior to any surface-disturbing activities an inventory of paleontological resources (fossils) in Paleontological “Potential Fossil Yield Classification” (PFYC) Class 4 and Class 5 Areas (Fossil) shall be done. Mitigation of scientifically important paleontological Resources resources may include avoidance, monitoring, collection, excavation, or sampling. Mitigation of discovered scientifically important paleontological resources might require the relocation of disturbance over 100 meters. This, and any subsequent, mitigation work shall be conducted by a BLM -permitted Paleontologist. The lessee shall bear all costs for inventory and mitigation (WO IM-2009-011).

ON THE FOLLOWING LANDS DESCRIBED BELOW:

<LEGAL_DESCRIPTIONS>

Purpose: To protect scientific information that may be damaged from inadvertent or authorized uses.

Exception: None.

Modification: None.

Waiver: None.

**EXHIBIT KFO-CSU-16
BACKCOUNTRY AND SCENIC BYWAY VIEWSHEDS
CONTROLLED SURFACE USE**

Lease Number: <LEASE_NUMBER>

Stipulation: Surface occupancy is restricted within viewsheds of designated back country, Scenic and Historic Byways, at foreground and middleground distances (within 5 miles), unless topographically screened from view.

ON THE FOLLOWING LANDS DESCRIBED BELOW:

<LEGAL_DESCRIPTIONS>

Purpose: To protect scenic integrity of Colorado's Scenic and Historic Byways and their social and economic significance to nearby communities, and to Colorado's Statewide economy.

Exception: An exception to this stipulation may be granted by the Authorized Officer wherever Byway designation is revoked by the Governor's Scenic and Historic Byway Commission.

Modification: At the discretion of the Authorized Officer, this stipulation may be modified for specific areas, projects, etc., by removing the restriction for middle ground distances only during other than peak recreation-tourism seasons (dates) for each Byway, conditioned by a determination of no significant adverse effect to benefiting communities and economies.

Waiver: None.

**EXHIBIT KFO-CSU-17
STATE AND US HIGHWAY VIEWSHEDS
CONTROLLED SURFACE USE**

Lease Number: <LEASE_NUMBER>

Stipulation: Restrict the siting of oil and gas development and operations from all locations and all VRM objective classes at locations where they will otherwise be sky-lined above the horizon, as viewed from all State and U.S. Highways.

ON THE FOLLOWING LANDS DESCRIBED BELOW:

<LEGAL_DESCRIPTIONS>

Purpose: To protect Colorado's scenic horizons and their social and economic significance to nearby communities, and to Colorado's statewide economy.

Exception: For landscapes that are currently visually compromised, there may be an exception at the discretion of the Authorized Officer.

Modification: At the discretion of the Authorized Officer, this stipulation may be modified for specific areas, projects, etc., by adjusting the CSU where viewsheds in which oil and gas development and operations occur are not a scenic focal point, are visible for only a short travel distance, and lie in a background distance zone.

Waiver: None.

**EXHIBIT KFO-CSU-18
STATE AND US HIGHWAY VIEWSHEDS
CONTROLLED SURFACE USE**

Lease Number: <LEASE_NUMBER>

Stipulation: Rehabilitate all post-exploration and development within the foreground distance zone viewshed of all State, U.S., and Interstate Highways in order to replicate the original landscape contour and vegetation.

ON THE FOLLOWING LANDS DESCRIBED BELOW:

<LEGAL_DESCRIPTIONS>

Purpose: To protect the scenic quality of Colorado's major travel thoroughfares and their significant contributions to nearby communities, and to Colorado's Statewide economy.

Exception: None.

Modification: At the discretion of the Authorized Officer, this stipulation may be modified for specific areas, projects, etc., by adjusting the CSU where viewsheds in which oil and gas development and operations occur are not a scenic focal point, are visible for only a short travel distance, and lie in a background distance zone.

Waiver: None.

**EXHIBIT KFO-CSU-20
KEY OBSERVATION POINTS
CONTROLLED SURFACE USE**

Lease Number: <LEASE_NUMBER>

Stipulation: Restrict surface occupancy or use within foreground-middleground distance zones of KOPs within any National Park or State Park.

ON THE FOLLOWING LANDS DESCRIBED BELOW:

<LEGAL_DESCRIPTIONS>

Purpose: To protect scenic integrity of Colorado's State and National Parks and their social and economic significance to nearby communities, and to Colorado's Statewide economy.

Exception: Unless topographically screened from view.

Modification: At the discretion of the Authorized Officer, this stipulation may be modified for specific areas, projects, etc., by removing the restriction for foreground-middleground distances only during other than peak recreation-tourism seasons (dates), on a Park-specific basis, for landscapes visible from KOPs whose visual quality is already compromised by other developments within this specific distance zone. This stipulation may be further modified for Parks that have already issued oil and gas leases within their boundaries. All modifications are conditioned further by a determination of no significant adverse effect to benefitting communities and economies.

Waiver: None.

EXHIBIT KFO-TL-2
BIG GAME PRODUCTION AREAS: ANTELOPE, ROCKY MOUNTAIN BIGHORN
SHEEP, MULE DEER, WHITE-TAILED DEER, ELK, MOOSE
TIMING LIMITATION

Lease Number: <LEASE_NUMBER>

Stipulation: No surface use is allowed during the following time period(s) in mapped big game production areas. (This stipulation does not apply to operation and maintenance of production facilities.)

- Antelope: April 15 to June 30
- Rocky Mountain Bighorn sheep: April 15 to June 30
- Mule deer/White-tailed deer: April 15 to June 30
- Elk: April 15 to June 30
- Moose: April 15 to June 30

ON THE FOLLOWING LANDS DESCRIBED BELOW:
<LEGAL_DESCRIPTIONS>

Purpose: To reduce behavioral disruption during parturition and early young rearing period.

Exception: The Field Manager may grant an exception if an environmental analysis indicates that the Proposed Action can be conditioned so as not to interfere with habitat function or compromise animal condition within the project vicinity. An exception may also be granted if the proponent, the BLM, and the CPW negotiate compensation that will satisfactorily offset anticipated impacts to big game production or habitat condition; or an agreement can be reached whereby a Colorado Oil and Gas Conservation Commission (COGCC) wildlife mitigation plan can be accommodated, consistent with established RMP objectives and decisions. An exception may also be granted for actions intended to enhance the long-term utility for availability of suitable habitat.

Modification: The Field Manager may modify the size and timeframes of this stipulation if the CPW monitoring information indicates that current animal use patterns are inconsistent with dates established for animal occupation. Modifications could be authorized if the Proposed Action could be conditioned so as not to interfere with critical habitat function or compromise animal condition. A modification may also be approved if the proponent, the BLM, and the CPW agree to compensation that satisfactorily offset detrimental impacts to big game production or habitat condition; or an agreement can be reached where by a COGCC wildlife mitigation plan can be accommodated consistent with established RMP objectives and decisions.

Waiver: The Field Manager may grant a waiver if the CPW determines that the area is no longer utilized by big game for production purposes.

**EXHIBIT KFO-LN-1
MIGRATORY BIRD NESTING HABITAT
LEASE NOTICE**

Lease Number: <LEASE_NUMBER>

Lease Notice: Avoid or minimize disruption of migratory bird nesting activity by siting or prioritizing vegetation clearing, facility construction, and concentrated operational activities (such as drilling, completion, utility installation) in order to avoid the involvement of higher value migratory bird habitats, especially during the core migratory bird nesting season (from May 15 to July 15).

On the following lands described below:
<LEGAL_DESCRIPTIONS>

**EXHIBIT KFO-LN-5
CULTURAL RESOURCES
LEASE NOTICE**

Lease Number: <LEASE_NUMBER>

Lease Notice: The lessee is hereby notified that Class III Cultural Resource Inventory may be required prior to surface-disturbing activities. Mitigation measures Cultural may be required in order to reduce the impacts of surface disturbances on Resources the affected cultural resources. These mitigating measures may include, but are not limited to, relocation of roads, well pads, and other facilities; evaluative testing; data recovery; and/or fencing. Mitigation measures may be required upon the discovery of any cultural resource. All cultural resource work must be performed by a BLM-permitted Archaeologist. The BLM may charge Federal licensees and permittees project costs of preservation activities conducted under the National Historic Preservation Act (NHPA) as a condition to the issuance of such license or permit [NHPA, as amended Section 110(g)].

On the following lands described below:

<LEGAL_DESCRIPTIONS>

PNG 2015-NSO-14-01
Surface Resource Protection and Ecological Integrity
NO SURFACE OCCUPANCY

No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).

For the purpose of:

Maintaining the ecological integrity of terrestrial and aquatic ecosystems and watersheds on the Pawnee National Grassland. Maintaining the integrity of other surface resources on the Pawnee National Grassland; including, aesthetic values, cultural and heritage resources, fish and wildlife species, grazing and rangelands, recreation settings and opportunities, riparian areas, scenery, soil, surface and subsurface water quality, and view sheds.

Exceptions: Exceptions will be considered in accordance with the direction provided in the Forest plan, 36 CFR 228.104, and other applicable regulations and policies.

Modifications: Modifications will be considered in accordance with the direction provided in the Forest plan, 36 CFR 228.104, and other applicable regulations and policies.

Waiver: Waivers will be considered in accordance with the direction provided in the Forest plan, 36 CFR 228.104, and other applicable regulations and policies.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

PNG-R2-FS-2820-13-(92)
NOTICE FOR LANDS OF THE NATIONAL FOREST SYSTEM
UNDER JURISDICTION OF
DEPARTMENT OF AGRICULTURE

The permittee/lessee must comply with all the rules and regulations of the Secretary of Agriculture set forth at Title 36, Chapter II, of the Code of Federal Regulations governing the use and management of the National Forest System (NFS) when not inconsistent with the rights granted by the Secretary of Interior in the permit. The Secretary of Agriculture's rules and regulations must be complied with for (1) all use and occupancy of the NFS prior to approval of an exploration plan by the Secretary of the Interior, (2) uses of all existing improvements, such as forest development roads, within and outside the area permitted by the Secretary of the Interior, and (3) use and occupancy of the NFS not authorized by an exploration plan approved by the Secretary of the Interior.

All matters related to this stipulation are to be addressed to:

District Ranger, Pawnee National Grassland
115 2nd Avenue – PO Box 386
Ault, CO 80610
(970) 834-9270

who is the authorized representative of the Secretary of Agriculture.

NOTICE

CULTURAL AND PALEONTOLOGICAL RESOURCES - The FS is responsible for assuring that the leased lands are examined to determine if cultural resources are present and to specify mitigation measures. Prior to undertaking any surface-disturbing activities on the lands covered by this lease, the lessee or operator, unless notified to the contrary by the FS, shall:

1. Contact the FS to determine if a site specific cultural resource inventory is required. If a survey is required, then:
2. Engage the services of a cultural resource specialist acceptable to the FS to conduct a cultural resource inventory of the area of proposed surface disturbance. The operator may elect to inventory an area larger than the area of proposed disturbance to cover possible site relocation which may result from environmental or other considerations. An acceptable inventory report is to be submitted to the FS for review and approval at the time a surface disturbing plan of operation is submitted.
3. Implementation mitigation measures required by the FS and BLM to preserve or avoid destruction of cultural resource values. Mitigation may include relocation of proposed facilities, testing, salvage, and recordation or other protective measures. All costs of the inventory and mitigation will be borne by the lessee or operator, and all data and materials salvaged will remain under the jurisdiction of the U.S. Government as appropriate.

The lessee or operator shall immediately bring to the attention of the FS and BLM any cultural or paleontological resources or any other objects of scientific interest discovered as a result of surface operations under this lease, and shall leave such discoveries intact until directed to proceed by FS and BLM.

ENDANGERED OR THREATENED SPECIES - The FS is responsible for assuring that the leased land is examined prior to undertaking any surface-disturbing activities to determine effects upon any plant or animal species listed or proposed for listing as endangered or threatened, or their habitats. The findings of this examination may result in some restrictions to the operator's plans or even disallow use and occupancy that would be in violation of the Endangered Species Act of 1973 by detrimentally affecting endangered or threatened species or their habitats.

The lessee/operator may, unless notified by the FS that the examination is not necessary, conduct the examination on the leased lands at his discretion and cost. This examination must be done by or under the supervision of a qualified resource specialist approved by the FS. An acceptable report must be provided to the FS identifying the anticipated effects of a proposed action on endangered or threatened species or their habitats.

Appendix C. References

- Autenrieth, R. (ed). 1983. Guidelines for the management of pronghorn antelope. Texas Parks and Wildlife Department, Austin, Texas. 51pp.
- Bartmann, R. M., G. C. White, L. H Carpenter. 1992. Compensatory mortality in a Colorado mule deer population. *Wildlife Monographs* 121: 1-39.
- Bennett, A. and Loomis, J. 2015. Are Housing Prices Pulled Down or Pushed Up by Fracked Oil and Gas Wells? A Hedonic Price Analysis of Housing Values in Weld County, Colorado. *Society & Natural Resources*, 28:11, 1168-1186.
- Berger, J., K. Murray Berger and J. Beckman. 2006. *Wildlife and Energy Development: Pronghorn of the Upper Green River Basin – Year 1 Summary*. Wildlife Conservation Society, Bronx, NY.
- Berthinussen, A. and Altringham, J. 2012. The effect of a major road on bat activity and diversity. *Journal of applied ecology*, 49(1), pp.82-89.
- Blehert, D.S., Hicks, A.C., Behr, M., Meteyer, C.U., Berlowski-Zier, B.M., Buckles, E.L., Coleman, J.T., Darling, S.R., Gargas, A., Niver, R. and J.C. Okoniewski. 2009. Bat white-nose syndrome: an emerging fungal pathogen? *Science*, 323(5911), pp.227-227.
- Bohnenkamp, S., Finken, A., McCallum, E., Putz, A., and Goreham, G. 2011. Concerns of the North Dakota Bakken Oil Counties: Extension Service and Other Organizations' Program Responses to These Concerns. A report prepared for Center for Community Vitality, NDSU Extension Service, North Dakota State University, Fargo.
- Boslett, A., Guilfoos, T., and Lang, C. 2016. *Valuation of the External Costs of Unconventional Oil and Gas Development: The Critical Importance of Mineral Rights Ownership*. University of Rhode Island.
- Boyles, J.G., 2017. Benefits of knowing the costs of disturbance to hibernating bats. *Wildlife Society Bulletin*, 41(2), pp.388-392.
- Bregman, T.P., Sekercioglu, C.H., and J.A. Tobias. 2014. Global patterns and predictors of bird species responses to forest fragmentation: implications for ecosystem function and conservation. *Biological Conservation*, 169, pp.372-383.
- Brown, R.B., Geertsen, H.R., and R.S. Krannich. 1989. Community Satisfaction and Social Integration in a Boomtown—A Longitudinal Analysis. *Rural Sociology*, 54:4, 568–586.
- Brown, R.B., Dorius, S.F., and R.S. Krannich. 2005. The Boom-Bust Recovery Cycle—Dynamics of Change in Community Satisfaction and Social Integration in Delta, Utah: *Rural Sociology*, 70:1, 28–49.
- Bureau of Land Management (BLM). 1986. Record of Decision for Northeast Resource Management Plan. Cañon City District, Colorado. Bureau of Land Management, U.S. Department of the Interior. September. Available online at: <https://eplanning.blm.gov/eplanning-ui/project/68393/510>. Accessed on October 21, 2021.
- Bureau of Land Management (BLM). 1991. Record of Decision for the Oil and Gas Plan Amendment to the Northeast Resource Management Plan. Cañon City District, Colorado. Bureau of Land Management, U.S. Department of the Interior. December. Available online at: <https://eplanning.blm.gov/eplanning-ui/project/68393/510>. Accessed on October 21, 2021.

- Bureau of Land Management (BLM). 1996. Record of Decision for the Royal Gorge Resource Area Approved Resource Management Plan. Cañon City District, Colorado. Bureau of Land Management, U.S. Department of the Interior. May. Available online at: <https://eplanning.blm.gov/eplanning-ui/project/68393/510>. Accessed on October 21, 2021.
- Bureau of Land Management (BLM). 1997. White River Record of Decision and Approved Resource Management Plan. Craig District, Meeker, Colorado. Bureau of Land Management, U.S. Department of the Interior. July. Available online at: <https://eplanning.blm.gov/eplanning-ui/project/65266/510>. Accessed on October 21, 2021.
- Bureau of Land Management (BLM). 2011. Record of Decision and Approved Resource Management Plan for Public Lands Administered by the Bureau of Land Management Little Snake Field Office, Craig, Colorado. Little Snake Field Office, Bureau of Land Management, U.S. Department of the Interior. October. Available online at: <https://eplanning.blm.gov/eplanning-ui/project/65605/510>. Accessed on October 21, 2021.
- Bureau of Land Management (BLM). 2015. Kremmling Field Office Record of Decision and Approved Resource Management Plan. Kremmling Field Office, Bureau of Land Management, U.S. Department of the Interior. June. Available online at: <https://eplanning.blm.gov/eplanning-ui/project/68543/510>. Accessed on October 21, 2021.
- Bureau of Land Management (BLM). 2015. White River Field Office Record of Decision and Approved Resource Management Plan Amendment for Oil and Gas Development. White River Field Office, Bureau of Land Management, U.S. Department of the Interior. August. Available online at: <https://eplanning.blm.gov/eplanning-ui/project/65266/570>. Accessed on October 21, 2021.
- Bureau of Land Management (BLM). 2015. Northwest Colorado Greater Sage-Grouse Proposed Land Use Plan Amendment and Final Environmental Impact Statement. Bureau of Land Management, U.S. Department of the Interior, and Forest Service, U.S. Department of Agriculture. June. Available online at: <https://eplanning.blm.gov/eplanning-ui/project/36511/510>. Accessed on October 21, 2021.
- Bureau of Land Management (BLM). 2015. Northwest Colorado Greater Sage-Grouse Approved Resource Management Plan Amendment. Northwest Colorado District Office, Bureau of Land Management, U.S. Department of the Interior. September. Available online at: <https://eplanning.blm.gov/eplanning-ui/project/36511/510>. Accessed on October 21, 2021.
- Bureau of Land Management (BLM). 2017. Colorado Air Resource Management Modeling Study (CARMMS), 2025 CAMx Modeling Results for the High, Low and Medium Oil and Gas Development Scenarios. CARMMS 2.0 Final Report. Prepared by Ramboll Environ. August. Available online at: <https://www.blm.gov/programs/natural-resources/soil-air-water/air/colorado>. Accessed on October 27, 2021.
- Bureau of Land Management (BLM). 2020. 2019 Annual Report. Annual Report 2.0. BLM Colorado State Office. Available online at: <https://www.co.blm.gov/AirResourcesReport/>. Accessed on October 28, 2021.
- Bureau of Land Management (BLM). 2020. Greater Sage-Grouse Colorado Adaptive Management Report.
- Bureau of Land Management (BLM). 2020. BLM Specialist Report on Annual Greenhouse Gas Emissions and Climate Trends.

- Bureau of Land Management (BLM). 2021. BLM Specialist Report on Annual Greenhouse Gas Emissions from Coal, Oil, and Gas Exploration and Development on Public Lands and the Federal Mineral Estate. Available online at: <https://www.co.blm.gov/AirResourcesReport/ghg/>. Accessed on October 1, 2021.
- Canfield, J. E., L. J. Lyon, J. M. Hillis, and M. J. Thompson. 1999. Ungulates. Pages 6.1-6.25 in G. Joslin, and H. Youmans, editors. Effects of recreation on Rocky Mountain wildlife: A Review for Montana. Committee on Effects of Recreation on Wildlife, Montana Chapter of The Wildlife Society. 307pp.
- Carbyn, L.N., H.J. Armbruster, and C. Mamo. 1994. The swift fox reintroduction program in Canada from 1983 to 1992. Restoration of endangered species. Cambridge University Press, Cambridge.
- Claireau, F., Bas, Y., Pauwels, J., Barré, K., Machon, N., Allegrini, B., Puechmaille, S.J. and C. Kerbiriou. 2019. Major roads have important negative effects on insectivorous bat activity. *Biological Conservation*, 235, pp.53-62.
- Coates, P.S., Prochazka, B.G., O'Donnell, M.S., Aldridge, C.L., Edmunds, D.R., Monroe, A.P., Ricca, M.A., Wann, G.T., Hanser, S.E., Wiechman, L.A., and M.P. Chenaille. 2021. Range-wide greater sage-grouse hierarchical monitoring framework—Implications for defining population boundaries, trend estimation, and a targeted annual warning system: U.S. Geological Survey Open-File Report 2020–1154, 243 p., <https://doi.org/10.3133/ofr20201154>.
- Collins, G.H. 2016. Seasonal distribution and routes of pronghorn in the northern Great Basin. *Western North American Naturalist*, 76(1), pp.101-113.
- Collopy, M.W., Woodbridge, B. and J.L. Brown. 2017. Golden Eagles in a Changing World. *Journal of Raptor Research*, 51(3), pp.193-197.
- Colorado Oil and Gas Conservation Commission (COGCC). Colorado Oil and Gas Conservation Commission website database. Accessed on October 27, 2021. Available online at: <http://cogcc.state.co.us/>.
- Colorado Parks and Wildlife (CPW). 2008. Northwest Colorado Greater Sage-Grouse Conservation Plan, Northwest Colorado Local Working Group Plan.
- Colorado Parks and Wildlife (CPW). 2015. Colorado's State Wildlife Action Plan, Denver, CO. Available online at: https://cpw.state.co.us/Documents/WildlifeSpecies/SWAP/CO_SWAP_FULLVERSION.pdf. Accessed on October 21, 2021.
- Council on Environmental Quality (CEQ). 2016. Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews. Available online at: https://ceq.doe.gov/docs/ceq-regulations-and-guidance/nepa_final_ghg_guidance.pdf. Accessed on October 27, 2021.
- Dechant, J.A., Sondreal, M.L., Igl, L.D., Goldade, C.M., Zimmerman, A.L., and B.R. Euliss. 2002. Effects of management practices on grassland birds: Ferruginous Hawk. USGS Northern Prairie Wildlife Research Center, p.149.
- Desmond, M.J., Savidge, J.A., and K.M. Eskridge. 2000. Correlations between burrowing owl and black-tailed prairie dog declines: a 7-year analysis. *Papers in Natural Resources*, p.162.

- Dwinnell, S. P., H. Sawyer, J. E. Randall, J. L. Beck, J. S. Forbey, G. L. Fralick, and K. L. Monteith. 2019. Where to forage when afraid: Does perceived risk impair use of the foodscape? *Ecological Applications* 2019 Oct. 29(7):e01972.
- Easterly, T., A. Wood, and T. Litchfield. 1992. Responses of pronghorn and mule deer to petroleum development on crucial winter range in the Rattlesnake Hills. Wyoming Game and Fish Dept., Cheyenne, WY. 67pp.
- Fahrig, L. 2003. Effects of habitat fragmentation on biodiversity. *Annual review of ecology, evolution, and systematics*, 34(1), pp.487-515.
- Fellers, G.M. and E.D. Pierson. 2002. Habitat use and foraging behavior of Townsend's big-eared bat (*Corynorhinus townsendii*) in coastal California. *Journal of mammalogy*, 83(1), pp.167-177.
- Fellows, S.D. and S.L. Jones. 2009. Status assessment and conservation action plan for the Long-billed Curlew (*Numenius americanus*). Digitalcommons.unl.edu.
- Finley, D.J., White, G.C., and J.P. Fitzgerald. 2005. Estimation of swift fox population size and occupancy rates in eastern Colorado. *The Journal of Wildlife Management*, 69(3), pp.861-873.
- Geist, V. 1978. Life strategies, human evolution, environmental design. Springer-Ferlag, Newark. 495 pp.
- George, R. 2003. Conservation plan for grassland species in Colorado. Colorado Division of Wildlife.
- Gordon, K.M., Keffer, K.C., and S.H. Anderson. 2003. Impacts of recreational shooting on black-tailed prairie dog behavior, population, and physiology. Wyoming Cooperative Fish and Wildlife Research Unit, University of Wyoming, Laramie, WY.
- Greider, T., Krannich, R.S., and E.H. Berry. 1991. Local Identity, Solidarity, and Trust in Changing Rural Communities. *Sociological Focus*, 24:4, 263-282.
- Hamilton, B.T., Hart, R. and J.W. Sites. 2012. Feeding ecology of the Milksnake (*Lampropeltis triangulum*, Colubridae) in the western United States. *Journal of Herpetology*, 46(4), pp.515-523.
- Harmata, A.R. 2002. Vernal migration of Bald Eagles from a southern Colorado wintering area. *Journal of Raptor Research*, 36(4), pp.256-264.
- Hebblewhite, M. and E. Merrill. 2008. Modelling wildlife-human relationships for social species with mixed-effects resource selection models. *Journal of Applied Ecology* Accepted October 2007.
- Headwaters Economics. 2020. A Profile of Socioeconomic Measures: Weld County, Colorado. Available online at: <https://headwaterseconomics.org/tools/economic-profile-system/>. Accessed January 2020.
- Headwaters Economics. 2021a. Bureau of Land Management Socioeconomic Profile; A Profile of Industries that Include Travel and Tourism; Profile of Mining, Including Oil and Gas: Jackson County, Moffat County, Rio Blanco County, Routt County Colorado. Available online at: <https://headwaterseconomics.org/tools/economic-profile-system/>. Accessed October 19, 2021.
- Headwaters Economics. 2021b. Bureau of Land Management Socioeconomic Profile; A Profile of Industries that Include Travel and Tourism; Profile of Mining, Including Oil and Gas: Las Animas County; Weld County, Colorado. Available online at: <https://headwaterseconomics.org/tools/economic-profile-system/>. Accessed on October 19, 2021.
- Higgs, A.J. 1981. Island biogeography theory and nature reserve design. *Journal of Biogeography*, pp.117-124.

- Hunter, L.M., Krannich, R.S., and M.D. Smith. 2002. Rural Migration, Rapid Growth, and Fear of Crime. *Rural Sociology*, 67:1, 71–89.
- Interagency Working Group on the Social Cost of Greenhouse Gases (IWG). 2021. Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide, Interim Estimates under Executive Order 13990. Interagency Working Group on Social Cost of Greenhouse Gases. February. Available online at: https://www.whitehouse.gov/wp-content/uploads/2021/02/TechnicalSupportDocument_SocialCostofCarbonMethaneNitrousOxide.pdf. Accessed on October 22, 2021.
- Intergovernmental Panel on Climate Change (IPCC). 2014: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II, and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland, 151 pp. Available online at: <https://www.ipcc.ch/report/ar5/syr/>. Accessed on October 27, 2021.
- Kahn, R., L. Fox, P. Horner, B. Giddings, and C. Roy editors. 1997. Conservation assessment and conservation strategy for swift fox in the United States.
- Knopf, F. L. and B. J. Miller. 1994. *Charadrius montanus*-Montane, grassland, or bare-ground plover? *The Auk* 111: 504-506.
- Kotliar, N.B., Baker, B.W., Whicker, A.D., and G. Plumb. 1999. A critical review of assumptions about the prairie dog as a keystone species. *Environmental management*, 24(2), pp.177-192.
- Krupnick, A. and I. Echarte. 2017. Housing Market Impacts of Unconventional Oil and Gas Development: The Community Impacts of Shale Gas and Oil Development. *Resources for the Future*. Available online at: <https://www.rff.org/publications/reports>. Accessed on October 21, 2021.
- Larson, C.L., Reed, S.E., Merenlender, A.M., and K.R. Crooks. 2019. A meta-analysis of recreation effects on vertebrate species richness and abundance. *Conservation Science and Practice*, 1(10).
- Lutz, D. W., J. R. Heffelfinger, S. A. Tessmann, R. S. Gamo, and S. Siegel. 2011. Energy Development Guidelines for Mule Deer. Mule Deer Working Group, Western Association of Fish and Wildlife Agencies, USA.
- Mackessy, S.P. 2007. Ecology of the Desert Massasauga Rattlesnake in Colorado: Habitat and Resource Utilization. A report to the CDOW and USFWS for the Colorado Wildlife Conservation Grant Program.
- Office of Management and Budget. 2021. Social Cost of Greenhouse Gases. Available online at: <https://www.whitehouse.gov/omb/information-regulatory-affairs/regulatory-matters/#scghgs>. Accessed on October 22, 2021.
- Preisler, FI. K., A. A. Ager, and M. J. Wisdom. 2006. Statistical methods for analyzing responses of wildlife to human disturbance. *Journal of Applied Ecology* 43:164-172.
- Roddewig, R. and R. Cole. 2014. Real Estate Value Impacts from Fracking: Industry Response and Proper Analytical Techniques. *Real Estate Issues* 39:3, 6-20.
- Rost, G. R. and J. A. Bailey. 1979. Distribution of mule deer and elk in relation to roads. *Journal of Wildlife Management* 43:634–641.
- Roth Jr, S.D. and J.M. Marzluff. 1989. Nest placement and productivity of Ferruginous Hawks in western Kansas. *Transactions of the Kansas Academy of Science* (1903), pp.132-148.

- Samson, F.B., Knopf, F.L., and W.R. Ostlie. 2004. Great Plains ecosystems: past, present, and future. *Wildlife Society Bulletin*, 32(1), pp.6-15.
- Sawyer, H. Nielson, R.M., Linzey, F., and L.L. McDonald. 2006. Winter habitat selection of mule deer before and during development of a natural gas field. *The Journal of Wildlife Management* 70(2): 396-403.
- Sawyer, H., Korfanta, N.M., Nielson, R.M., Montieth, K.L., and D. Strickland. 2017. Mule deer and energy development—long-term trends of habituation and abundance. *Global Change Biology* 23 .4521-4529.
- Sawyer, H., Beckmann, J.P., Seidler, R.G., and J. Berger. 2019. Long-term effects of energy development on winter distribution and residency of pronghorn in the Greater Yellowstone Ecosystem. *Conservation Science and Practice*, 1(9).
- Searle, K.R., Rice, M.B., Anderson, C.R., Jr., Bishop, C., and N.T. Hobbs. 2015. Asynchronous vegetation phenology enhances winter body condition of a large mobile herbivore. *Oecologia*, 179:377–391.
- Smith, M.D., Krannich, R.S., and L.M. Hunter. 2001. Growth, Decline, Stability, and Disruption – A Longitudinal Analysis of Social Well-being in Four Western Rural Communities. *Rural Sociology*, 66:3, 425–450.
- Stilwell, Dean P., A.M. Elser, and S.W. Davis-Lawrence. 2012. Reasonable Foreseeable Development Scenario for Oil And Gas: Royal Gorge Field Office, Colorado. Final Report, March 22, 2012. Cheyenne, Wyoming: United States Department of the Interior, Bureau of Land Management.
- Taylor, K.L., Beck, J.L., and S.V. Huzurbazar. 2016. Factors influencing winter mortality risk for pronghorn exposed to wind energy development. *Rangeland Ecology & Management*, 69(2), pp.108-116.
- Thomas, D.W. 1995. Hibernating bats are sensitive to nontactile human disturbance. *Journal of Mammalogy*, 76(3), pp.940-946.
- U.S. Department of Agriculture, National Agricultural Statistical Service (USDA NASS). 2019. 2017 Census of Agriculture: Colorado State and County Data. Volume 1, Geographic Area Series, Part 6. AC-17-A-6. Issued April 2019.
- U.S. Department of the Interior. 2018. Improving Habitat Quality in Western Big-Game Winter Range and Migration Corridors. Order No. 3362. The Secretary of the Interior, Washington (DC). February 9, 2018. Available online at: https://www.doi.gov/sites/doi.gov/files/elips/documents/3362_-_improving_habitat_quality_in_wester_big-game_winter_range_and_migration_corridors.pdf. Accessed on October 27, 2021.
- U.S. Energy Information Administration (EIA). 2021a. State Energy-Related Carbon Dioxide Emissions Tables. Available online at: <https://www.eia.gov/environment/emissions/state/>. Accessed on October 21, 2021.
- U.S. Energy Information Administration (EIA). 2021b. Supply disruptions and rising demand boosted East Coast petroleum product imports in March. Available online at: <https://www.eia.gov/todayinenergy/detail.php?id=48316>. Accessed on October 21, 2021.
- U.S. Energy Information Administration (EIA). 2021c. Annual Energy Outlook 2021. Available online at: <https://go.usa.gov/xMEuH>. Accessed on October 21, 2021.

- U.S. Environmental Protection Agency (EPA). 2021. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019. Available online at: <https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2019>. Accessed on October 21, 2021.
- U.S. Environmental Protection Agency (EPA). 2021. Greenhouse Gas Equivalencies Calculator. March. Available online at: <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>. Accessed on August 11, 2021.
- U.S. Fish and Wildlife Service (FWS). 2000. Endangered and threatened wildlife and plants; 12-month finding for a petition to list the black-tailed prairie dog as threatened. Pages 5476-5488 in Federal Register Volume 65, Number 24, February 4, 2000.
- U.S. Fish and Wildlife Service (FWS). 2008. Preble's Meadow Jumping Mouse (*Zapus hudsonius preblei*) 5-year Review, Short Form Summary. Region 6.
- U.S. Fish and Wildlife Service (FWS). 2013. Endangered Species: Preble's meadow jumping mouse critical habitat. Available online at: <https://fws.gov/mountain-prairie/es/preblesMeadowJumpingMouse.php>. Accessed on October 21, 2021.
- U.S. Fish and Wildlife Service (FWS). 2021. Birds of Conservation Concern 2021. United States Department of the Interior, U.S. Fish and Wildlife Service, Migratory Birds, Falls Church, Virginia. Available online at: <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>. Accessed on October 27, 2021.
- U.S. Forest Service (USFS). 2014. Arapaho and Roosevelt National Forests and PNG Oil and Gas Leasing Analysis Final Environmental Impact Statement. Arapaho and Roosevelt National Forests and Pawnee National Grassland, Rocky Mountain Region, Forest Service, U.S. Department of Agriculture. December. Available online at: <https://www.fs.usda.gov/project/?project=41812>. Accessed on October 21, 2021.
- U.S. Forest Service (USFS). 2015. Record of Decision for the Pawnee National Grassland Oil and Gas Leasing Analysis. Arapaho and Roosevelt National Forests and Pawnee National Grassland, Rocky Mountain Region, Forest Service, U.S. Department of Agriculture. February. Available online at: <https://www.fs.usda.gov/project/?project=41812>. Accessed on October 21, 2021.
- Wastell, A.R. and S.P. Mackessy. 2011. Spatial ecology and factors influencing movement patterns of desert massasauga rattlesnakes (*Sistrurus catenatus edwardsii*) in southeastern Colorado. *Copeia*, 2011(1), pp.29-37.
- Watkins, B.E., Bishop, C.J., Bergman, E.J., Hale, B., Wakeling, B.F., Bronson, A., Carpenter, L.H., and D.W. Lutz. 2007. Habitat guidelines for mule deer: Colorado Plateau shrubland and forest ecoregion. Mule Deer Working Group, Western Association of Fish and Wildlife Agencies.
- Webb, S.L., Dzialak, M.R., Kosciuch, K.L., and J.B. Winstead. 2013. Winter resource selection by mule deer on the Wyoming–Colorado border prior to wind energy development. *Rangeland ecology & management*, 66(4), pp.419-427.
- Winne, C.T., Willson, J.D., Todd, B.D., Andrews, K.M., and J.W. Gibbons. 2007. Enigmatic decline of a protected population of eastern kingsnakes, *Lampropeltis getula*, in South Carolina. *Copeia*, 2007(3), pp.507-519.

Appendix D. Greater Sage-Grouse Plan Conformance and Leasing Considerations

Greater Sage-Grouse Plan Conformance and Leasing Considerations

The 2015 Greater Sage-grouse (GRSG) Approved Resource Management Plan Amendment (ARMPA) states, “Priority will be given to leasing and development of fluid mineral resources, including geothermal, outside Priority Habitat Management Areas (PHMA) and General Habitat Management Areas (GHMA). When analyzing leasing and authorizing development of fluid mineral resources, including geothermal, in PHMA and GHMA, and subject to applicable stipulations for the conservation of GRSG, priority will be given to development in non-habitat areas first and then in the least suitable habitat for GRSG.” See, e.g., Northwest Colorado ARMPA, Objective MR-1.

BLM Colorado evaluates GRSG leasing prioritization on a quarterly basis for each lease sale (e.g., March, June, September, and December) that proposes parcels in GRSG All Designated Habitat (ADH, which comprises PHMA, GHMA, and Linkage Connectivity Habitat Management Areas [LCHMA]) regardless of Field Office or District boundaries. Furthermore, assessment of total authorized leases within GRSG management zones are analyzed within the Environmental Assessment (EA) (see **Section 3.3.9**). BLM Colorado continues to prioritize oil and gas leasing in consideration of GRSG management by offering the majority of parcels outside of GRSG habitat areas. From March 2012 to September 2015, prior to the GRSG ARMPA, BLM Colorado offered 925 parcels during oil and gas lease sales and issued 763 leases, exclusively outside of GRSG habitat. Since the signing of the GRSG ARMPA in September 2015, BLM Colorado has offered 573 parcels for sale, 192 of which were in GRSG ADH, and 80 leases have been authorized in ADH (see **Table 1** below). Leases for lands containing PHMA and GHMA are subject to stipulations, notices, required design features, and management actions for protection of GRSG habitat. Parcels outside of GRSG habitat are considered to be higher priority for leasing compared to those in GRSG habitat and are not evaluated further in this attachment.

Lease Sale Year	Total Parcels Offered	Total Parcels Offered in GRSG ADH	% Parcels Offered in GRSG ADH	Authorization Status of Parcels in GRSG ADH
2015	57	11	19%	2 parcels authorized
2016	57	18	32%	0 parcels authorized
2017	141	26	18%	22 parcels authorized
2018	106	45	42%	38 parcels authorized
2019	103	75	73%	1 parcel authorized, 42 pending
March 2020	12	0	0%	n/a
September 2020	55	0	0%	n/a
December 2020	42	17	40%	17 parcels authorized
March 2021*	80	19	24%	Sale postponed
June 2021*	34	8	24%	Sale postponed
First Quarter 2022*	119	27	23%	Proposed Action Alternative
First Quarter 2022*	9	6	67%	Partial Leasing Alternative
Total	573	192	34%	80 parcels authorized, 42 parcels pending
*March 2021, June 2021, and First Quarter 2022 parcels are not counted in the “total” calculations because no parcels have been officially offered.				

The BLM reviews plan conformance during the lease sale process and again during proposed site-specific actions, such as when processing an Application for Permit to Drill (APD). At the APD stage, site-specific impacts would be evaluated, and additional Conditions of Approval (COAs) may be applied. At

both stages, the BLM would consult with Colorado Parks and Wildlife (CPW) to address any concerns related to GRSG or other wildlife.

The BLM manages leasable fluid minerals to meet Objective MR-1. Prioritization of leasing is accomplished, in part, by applying the seven management decisions (MDs) and associated stipulations and notices that pertain to unleased fluid minerals in GRSG management areas (MR-1 through MR-7; Stipulations GRSG NSO-46e(1), NSO-46e(2), TL-46e, LN-46e). Implementation of these seven MDs help to mitigate disturbance, habitat loss, and combined impacts through the application of no leasing within 1 mile of active leks, no surface occupancy (NSO) in PHMA, timing limitations (TL) in PHMA and GHMA, and density and disturbance caps in PHMA. In addition, prioritization of parcels is based on consideration of biological and mineral resource factors, which provide insight into which parcels should be prioritized for leasing and those that would be more appropriate to offer at a later date.

Biological Components

Parcels are evaluated by the amount of PHMA/GHMA, proximity to leks (active leks and other status leks), population trends and adaptive management triggers, stipulations and notices applied, and input from CPW (see **Table 2** below). Parcels with less PHMA and GHMA are considered more favorable for leasing. Parcels in proximity to a greater amount of active leks are less favorable for leasing. Adaptive management triggers may also indicate if parcels in a particular population or management zone may require additional analysis before being offered for lease. Population trends are discussed in the GRSG analysis portion of this EA (see **Section 3.3.9**). In addition to any substantive comments made during the scoping process and considered in the analysis in this EA, these biological factors allow the BLM to consider the habitat conditions of the proposed parcels and determine which are appropriate to carry forward under the Proposed Action.

Parcel	Number of Active Leaks Within Identified Buffer Zone to Parcel*			Acres	Percent within PHMA	Percent within GHMA	Percent with GRSG NSO Stipulation
	1 -2 miles	2 – 3 miles	3-4 miles				
5	1	0	3	344	0%	100%	65%
34	1	0	1	1,246	0%	100%	0%
152	1	1	2	641	43%	57%	75%
153	2	0	0	2,440	88%	12%	100%
154	2	1	1	2,562	93%	7%	100%
165	2	0	3	1,400	87%	13%	100%
167	0	1	1	2,110	95%	5%	100%
171	0	4	0	1,882	72%	28%	100%
172	3	1	1	440	62%	38%	100%
175	1	1	1	834	64%	36%	86%
185	2	1	1	160	63%	37%	100%
186	1	2	0	880	60%	40%	100%
187	3	1	2	1,235	56%	44%	87%
238	1	0	4	1,270	100%	0%	100%
237	1	2	2	320	100%	0%	100%
244	0	0	4	1,409	0%	50%	0%
264	0	0	0	1,476	0%	95%	0%
5985	1	0	3	79	0%	96%	0%
5994	0	0	0	565	0%	100%	0%
6175	2	3	0	1,387	89%	11%	100%
6176	3	0	1	1,648	77%	23%	98%
6177	0	0	3	514	100%	0%	100%

**Table 2. Biological Components for GRSG Prioritization of Fluid Mineral Leasing –
Parcels Considered for 2022 Lease Sale**

Parcel	Number of Active Leaks Within Identified Buffer Zone to Parcel*			Acres	Percent within PHMA	Percent within GHMA	Percent with GRSG NSO Stipulation
	1 -2 miles	2 – 3 miles	3-4 miles				
6179	1	1	1	1,360	73%	27%	100%
6197	1	0	4	317	100%	0%	100%
6198	0	1	3	302	23%	4%	40%
6199	0	1	4	1,444	9%	50%	14%
6210	0	0	0	1,276	0%	74%	0%

*Reflects active leaks on all land ownership evaluated during consultation with CPW; all active leaks are evaluated during application of stipulations. There is no new leasing 1 mile from active leaks in ADH (MD MR-1).

Fluid Mineral Components

Parcels will be compared using factors such as: adjacency to current leases, proximity to active oil and gas locations, oil and gas agreements (communitization, exploratory unit, and secondary recovery), potential drainage cases, oil and gas potential, and Expressions of Interest (EOIs) submitted by an active lessee in the surrounding area (see **Table 3** below). Parcels adjacent to existing leases and/or units and in closer proximity to existing infrastructure would be considered more appropriate for leasing than parcels with no adjacent leases or infrastructure. Due to the NSO-46e(1) stipulation that would be applied to any parcel within PHMA and the NSO-46e(2) stipulation that would be applied within 2 miles of an active leak within GHMA, there may be the need to directionally drill from an authorized surface location outside of habitat, on an existing lease, or from non-Federal locations; in which case Objective MR-2 and Management Decisions MR 8 through MR 14 would apply, (2015 GRSG ARMPA). High oil and gas potential would also indicate that a parcel is more appropriate for leasing whereas a parcel with low or moderate oil and gas potential would be less appropriate for leasing. Potential drainage cases would indicate that there is a priority to lease the relevant parcel, though this is an infrequent situation. These factors will help identify the most appropriate parcels under current development conditions.

**Table 3. Fluid Mineral Components for GRSG Prioritization of Fluid Mineral Leasing –
Parcels Considered for 2022 Lease Sale**

Parcel	Adjacent Leases	Distance to Closest O&G Location	Potential Drainage	Within Existing O&G Agreement	O&G Potential
5	No adjacent leases; borders Fed, fee	Producing well 1.0 mi (WY)	No Drainage	No unit	High
34	No adjacent leases, borders Fed	Producing well 2.4 mi	No Drainage	No unit	High
152	No adjacent leases; borders Fed, fee	Producing well 2.5 mi	No Drainage	No unit	High
153	Adjacent lease	Contains temporarily abandoned well; Producing well 2.5 mi	No Drainage	No unit	High
154	Adjacent lease	Producing well 3.0 mi; Temporarily abandoned well 0.7 mi	No Drainage	No unit	High
165	Adjacent lease	Contains shut in well	No Drainage	No unit	High
167	Adjacent lease	Plugged well 0.7 mi	No Drainage	No unit	High
171	Adjacent lease	Producing well 5.4 mi; Temporarily abandoned well 0.3 mi	No Drainage	No unit	High
172	Adjacent lease	Producing well 2.6 mi	No Drainage	No unit	High

Table 3. Fluid Mineral Components for GRSG Prioritization of Fluid Mineral Leasing – Parcels Considered for 2022 Lease Sale					
Parcel	Adjacent Leases	Distance to Closest O&G Location	Potential Drainage	Within Existing O&G Agreement	O&G Potential
175	Adjacent lease	Producing well 7.3 mi; Temporarily abandoned well 1.6 mi	No Drainage	No unit	High
185	No adjacent leases; borders Fed, fee	Producing well 6.8 mi	No Drainage	No unit	High
186	Adjacent lease on west part	Producing well 5.9 mi	No Drainage	No unit	High
187	Adjacent lease	Producing well 8.8 mi	No Drainage	No unit	High
237	No adjacent lease, federal on all sides	Producing well 5.0 mi; Shut In well 3.8 mi	No Drainage	No unit	High
238	No adjacent lease, state on east edge	Producing well 2.0 mi; Shut In well 0.8 mi	No Drainage	No unit	High
244	Adjacent lease	Producing well 3.4; Shut In well 2.3 mi	No Drainage	Adjacent to COC 076551X	High
264	No adjacent lease, private to north	Producing well 4.1 mi	No Drainage	No unit	High
5985	No adjacent leases, borders fee S/SS	Producing well 2.9 mi	No Drainage	No unit	High
5994	No adjacent leases; borders Fed, fee	Producing well 0.4 mi (WY)	No Drainage	No unit	High
6175	No adjacent leases	Temporarily abandoned well 1.2 mi	No Drainage	No unit	High
6176	Adjacent lease, adjacent active unit	Producing well 0.8 mi	No Drainage	No unit, borders COC047671X	High
6177	No adjacent leases, borders Fed	Plugged well 1.9 mi	No Drainage	No unit	High
6179	No adjacent leases, borders Fed	Producing well 6.4 mi; Temporarily abandoned well 0.6 mi	No Drainage	No unit	High
6197	No adjacent lease, fee on west edge	Producing well 2.9 mi; Shut In well 1.8 mi	No Drainage	No unit	High
6198	Adjacent lease	Producing well 3.5 mi; Shut In well 3.1 mi	No Drainage	No unit	High
6199	Adjacent lease	Producing well 2.2 mi; Shut In well 3.0 mi	No Drainage	Adjacent to COC 076551X, COC 063212X	High to medium
6210	No adjacent lease, Fed on all sides	Producing well 3.3 mi	No Drainage	Adjacent to COC 076654X	High

Parcels Considered Low Priority for Leasing

Based on the biological and fluid mineral resource considerations for the parcels in the 2022 lease sale, BLM specialists have identified 18 parcels that are considered low priority for leasing but remain eligible for leasing in conformance with the 2015 GRSG ARMPA. Parcels are grouped by GRSG Management Zone (MZ), below.

Parcels 152, 153, 154, 165, 167, 171, 172, 175, 185, 186, 187, 6175, 6176, 6177, and 6179

The 15 parcels listed above are primarily in PHMA within MZ 3 of the Northwest Colorado (NWCO) population. The NWCO population has breached an adaptive management trigger for population counts, assessed by using the 3-year average high male count (HMC). As the NWCO population is the largest population, it is divided into ten unique MZs, which are each assessed for population individually. The population counts for MZ 3 have continued to decrease at a steady rate while most of the MZs in the NWCO population have slowed in their rate of decline or have begun to increase. A detailed discussion of the MZ and population trends are located in **Section 3.3.9** of the EA. Habitat quality in the MZ has decreased due to years of drought and over-utilization. MZ 3 overlaps the Sand Wash Herd Management Area, which was considerably over the appropriate management limit (AML) until September of 2021. Recovery of vegetation that provides important habitat for GRSG will likely be a slow process due to current drought conditions.

In addition to current habitat conditions, the parcels in MZ 3 are in close proximity to numerous active leks. Parcels 165, 167, 171, and 6176 are each within 4 miles of five active leks. Parcels 152, 153, 172, 185, 186, and 6179 are each within 4 miles of four active leks. The remaining parcels are each within 4 miles of two to three active leks (**Table 1**). The majority of parcels in MZ 3 would be under NSO stipulations. While there are current leases adjacent to Parcels 153, 154, 165, 171, 172, 175, and 6176, the majority of these leases lack active development. The closest producing well to the previously listed parcels is 0.8 mile from Parcel 6176 (**Table 2**). The next closest producing well is 2.5 miles from Parcel 153 (see map below). The BLM has determined that leasing in this area is a low priority under current conditions.

Parcels 237, 238, and 6197

Parcels 237, 238, and 6197 were previously analyzed and deferred from the December 2018 Lease Sale. Each of these parcels are entirely in PHMA within MZs 4 and 5 of the NWCO population. A detailed discussion of the MZ and population trends are located in **Section 3.3.9** of the EA. These parcels are in high quality habitat that supports breeding, brood-rearing, and winter habitat. Parcels 237, 238, and 6197 are each within 4 miles of five active leks (**Table 1**). Each of these parcels would have the GRSG NSO-46e(1) stipulation applied to the entirety of the parcel, which would provide surface protection for the leks in the area, and would require horizontal drilling to access the mineral estate. There are no adjacent Federal mineral leases; and the parcels are bordered by unleased Federal minerals (see map below). The distance of the parcels from current Federal mineral leases or non-Federal development would make fluid mineral extraction difficult under current conditions. The high quality of habitat paired with the inaccessibility to Federal minerals indicate that the parcels are low priority under current conditions.

Remaining Parcels Considered Higher Priority for Leasing

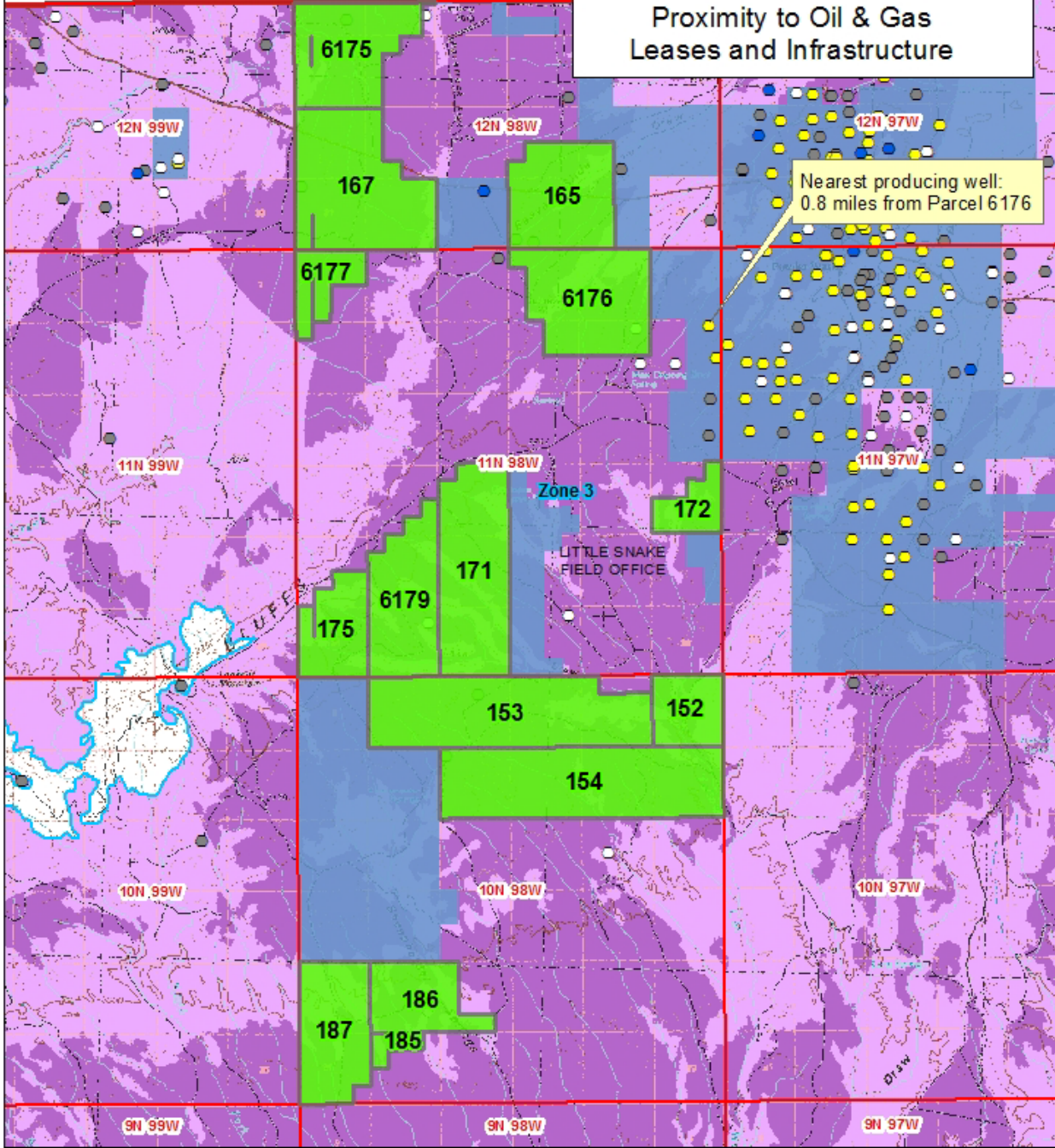
All parcels in GRSG ADH have been assessed under the prioritization process using biological and mineral considerations previously outlined. The proposed parcels considered higher priority either contain no GHMA or PHMA, or they are in ADH where stipulations and notices (2015 GRSG ARMPA) provide protections for GRSG habitat, and Federal mineral leases or development within proximity would allow for feasible mineral development.

Consideration of Prioritization Analysis

All proposed parcels are eligible for lease and parcels that are offered would have applicable stipulations and notices applied in accordance with the 2015 GRSG ARMPA. Application of stipulations and notices has been confirmed by CPW. The prioritization process described in this appendix is incorporated into the EA in **Section 3.3.9**. The Authorized Officer will consider the analysis and any associated public comments when making the final decision as to which parcels will be offered at the lease sale. Up to the

point of the sale, the Authorized Officer determines whether all, some, or none of the proposed parcels in GRSG habitat will be offered, and which parcels, if any, will be deferred, based on the analysis of the issues identified in the EA.

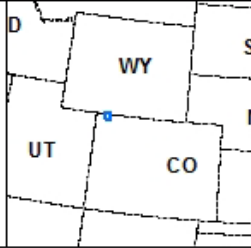
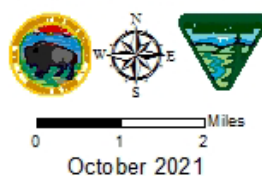
**Parcels in Management Zone 3
Proximity to Oil & Gas
Leases and Infrastructure**



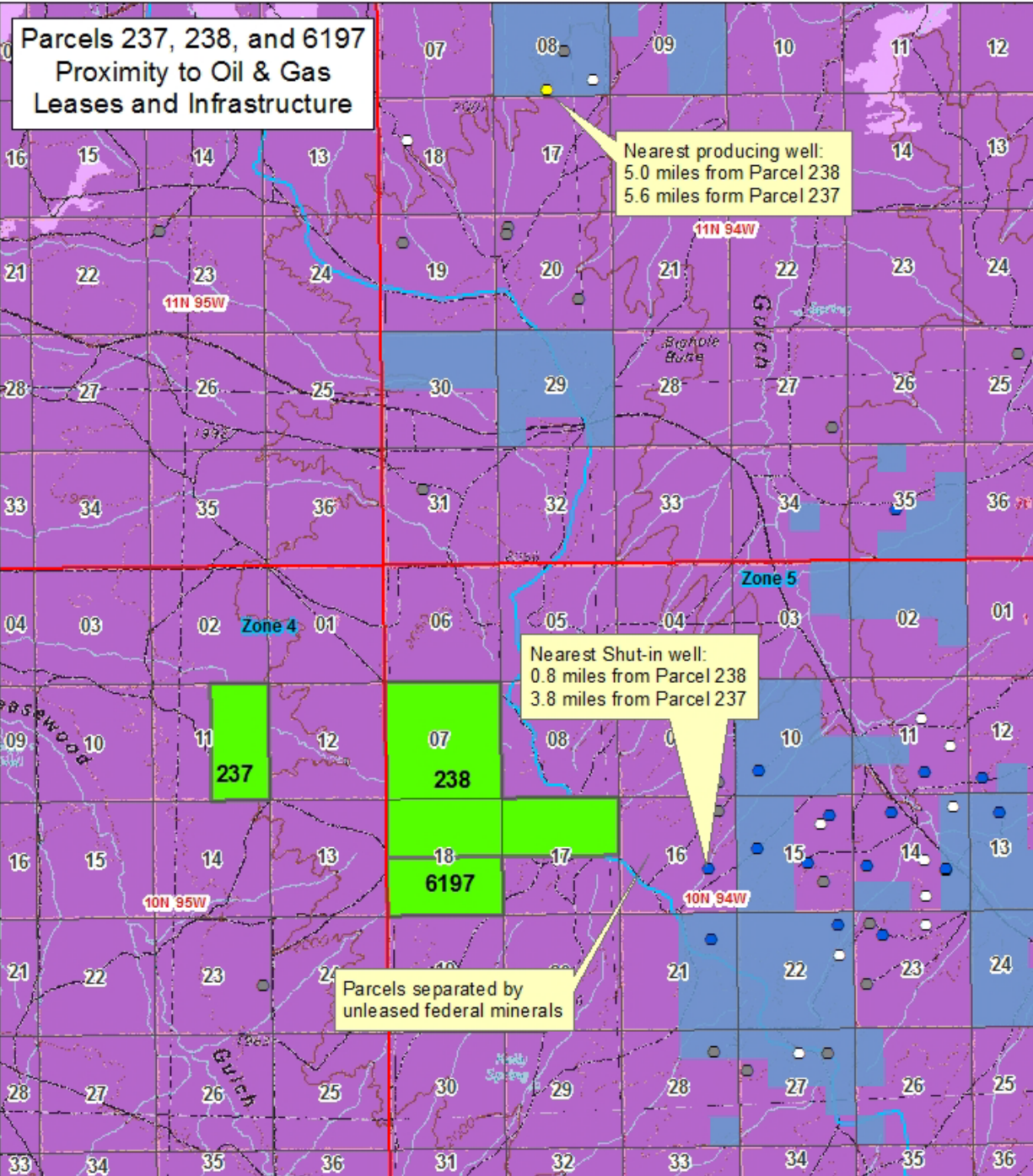
March 2022 Lease Sale - Parcels 152, 153, 154, 165, 167, 171, 172, 175, 185, 186, 187, 6175, 6176, 6177, and 6179
Little Snake Field Office

- Legend**
- MZ
 - Lease Sale Parcel
 - PHMA
 - Authorized Leases
 - GHMA

- Oil & Gas Wells**
- Abandoned, Plugged & Abandoned, or Drilled & Abandoned
 - Abandoned Location
 - Wells - Other Status
 - Producing

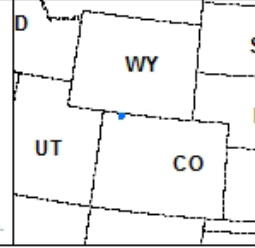
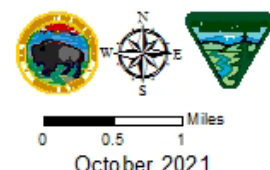


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March 2022 Lease Sale - Parcels 237, 238, and 6197
Little Snake Field Office

- Legend**
- MZ
 - Lease Sale Parcel
 - PHMA
 - Authorized Leases
 - GHMA
- Oil & Gas Wells**
- Abandoned, Plugged & Abandoned, or Drilled & Abandoned
 - Abandoned Location
 - Wells - Other Status
 - Producing



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