

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

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**Environmental Assessment  
for the Kremmling Field Office  
June 2014 Competitive Oil & Gas Lease Sale**

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Kremmling Field Office  
P O Box 68  
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# CHAPTER 1 – INTRODUCTION

## 1.1 IDENTIFYING INFORMATION

### BACKGROUND:

It is the policy of the Bureau of Land Management (BLM) as derived from various laws, including the Mineral Leasing Act of 1920 (MLA) and the Federal Land Policy and Management Act of 1976 (FLPMA), to make mineral resources available for disposal and to encourage development of mineral resources to meet national, regional, and local needs.

The BLM's Colorado State Office conducts quarterly competitive lease sales to sell available oil and gas lease parcels. A Notice of Competitive Lease Sale, which lists lease parcels to be offered at the auction, is published by the Colorado State Office at least 90 days before the auction is held. Lease stipulations applicable to each parcel are specified in the Sale Notice. The decision as to which public lands and minerals are open for leasing and what leasing stipulations may be necessary, based on information available at the time, is made during the land use planning process. Constraints on leasing and any future development of split estate parcels are determined by the BLM in consultation with the appropriate surface management agency or the private surface owner.

In the process of preparing a lease sale, the Colorado State Office sends a draft parcel list to each field office where the parcels are located. Field Office staff then review the legal descriptions of the parcels to determine if they are in areas open to leasing and that appropriate stipulations have been included; verify whether any new information has become available that might change any analysis conducted during the planning process; confirm that appropriate consultations have been conducted; and identify any special resource conditions of which potential bidders should be made aware. The nominated parcels are posted online for a two week public scoping period. This posting also includes the appropriate stipulations as identified in the relevant RMP. The BLM prepares an analysis consistent with the National Environmental Policy Act (NEPA), usually in the form of an Environmental Assessment (EA). Comments received from the public are reviewed and incorporated into the NEPA document, as applicable.

After the Field Office completes the draft parcel review and NEPA analysis and returns them to the State Office, a list of available lease parcels and associated stipulations is made available to the public through a Notice of Competitive Lease Sale (NCLS). Lease sale notices are posted on the Colorado BLM website at:

[http://www.blm.gov/nm/st/en/prog/energy/oil\\_and\\_gas/lease\\_sale\\_notices.html](http://www.blm.gov/nm/st/en/prog/energy/oil_and_gas/lease_sale_notices.html).

On rare occasions, the BLM may defer or withhold additional parcels prior to the day of the lease sale. In such cases, the BLM prepares an amendment to the sale notice.

If the parcels are not leased at the June 2014 lease sale, then they will remain available to be leased for a period of up to two years 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 that is not leased within a two-year period after an initial offering will no longer be available, and must go through a competitive lease sale process again prior to being leased.

The act of leasing does not authorize any development or use of the surface of lease lands, without further application by the operator and approval by the BLM.

In the future, the BLM may receive Applications for Permit to Drill (APDs) for those parcels that are leased. If APDs are received, the BLM conducts additional site-specific NEPA analysis before deciding whether to approve the APD, and what conditions of approval (COA) should apply.

Thirty four parcels comprising of 39,907.332 acres within the Kremmling Field Office (KFO) were nominated for the June 2014 Competitive Oil and Gas Lease Sale. This figure is comprised of 27,785.391 acres of federal land and 12,121.941 acres of split-estate land. The legal descriptions of the nominated parcels are in Attachment A.

This EA documents the review of the nominated parcels under the administration of the Kremmling Field Office. It serves to verify conformance with the approved land use plan, and provides the rationale for the field office's recommendation to offer or to defer particular parcels from a lease sale.

In accordance with Colorado BLM Instruction Memorandum No., CO-2012-027 and BLM IM-2010-117, this EA will be released for 30 days of public comment. Any comments received within the 30-day timeframe will be considered and incorporated into the EA as appropriate.

## **1.2 PROJECT LOCATION AND LEGAL DESCRIPTION**

### LEGAL DESCRIPTION:

Please see Attachments A, B, and C for Parcel Descriptions and Attachment F for maps of the parcels nominated, recommended for deferral and recommended for lease, all located in Jackson County, Colorado.

## **1.3 PURPOSE AND NEED**

The purpose of the Proposed Action is to consider opportunities for private individuals or companies to explore and develop oil and gas resources on specific public lands through a competitive leasing process.

The need for the action is to respond to the nomination or expression of interest for leasing, consistent with the BLM's responsibility under the Mineral Leasing Act (MLA), as amended, to promote the development of oil and gas on the public domain. Parcels may be nominated by the public, the BLM or other agencies. The MLA establishes that deposits of oil and gas owned by the United States are subject to disposition in the form and manner provided by the MLA under the rules and regulations prescribed by the Secretary of the Interior, where consistent with FLPMA and other applicable laws, regulations, and policies.

### **1.3.1 Decision to be Made**

The BLM will decide whether to lease the nominated parcels and, if so, under what terms.

## **1.4 PUBLIC PARTICIPATION**

### **1.4.1 Scoping**

The principal goal of scoping is to identify issues, concerns, and potential impacts that require detailed analysis. The BLM uses both internal and external scoping to identify potentially affected resources and associated issues.

Internal scoping was conducted through meetings of an interdisciplinary (ID) team of resource specialists and discussion of the nominated parcels. Internal scoping was initiated when the project was presented to the Kremmling Field Office interdisciplinary team on 07/27/2013. The following issues were identified:

- Overlap of parcels with Greater Sage Grouse Preliminary Priority Habitat

External scoping was conducted by posting the nominated lease parcels, stipulations from the RMP, for two weeks from August 5, 2013 to August 20, 2013. Stipulation summaries, GIS shapefiles, and maps were posted on the BLM Kremmling Field Office website:

<http://www.blm.gov/co/st/en/fo/kfo.html>

This external scoping process gave the public an opportunity to provide comments, which the BLM considered and incorporated into the EA as appropriate. The BLM sent letters to land surface owners whose land overlies federal minerals proposed for leasing. BLM also sent letters to Jackson County and Colorado Parks and Wildlife and five Native American Tribes (Northern Ute, Ute Mountain Ute, Southern Ute, and Eastern Shoshone), requesting comments on the nominated parcels.

Comments were received from Rocky Mountain Wild and Colorado Parks and Wildlife.

**Issues:** Comments received during public scoping included.

- Parcels are within greater sage-grouse production areas and the 4 mile buffer of a greater sage-grouse lek site. Some parcels are adjacent to greater sage grouse preliminary priority habitat.
- A parcel is within a bald eagle winter forage area.
- Impacts of leasing and development on wildlife production, winter habitat and migration areas.
- Two parcels are within Colorado State Wildlife Areas.

The EA will carry forward these issues for analysis. No issues that were raised during scoping were dismissed from detailed analysis. See Attachment E for Responses to Comments received during scoping.

### **1.4.2 Public Comment Period**

The preliminary EA and the unsigned Finding of No Significant Impact (FONSI) are available for a 30-day public review and comment period beginning November 27, 2013 and ending

December 30, 2013. The documents are available online at [http://www.blm.gov/co/st/en/BLM\\_Programs/oilandgas/oil\\_and\\_gas\\_lease/2014/may\\_2014\\_lease\\_sale.html](http://www.blm.gov/co/st/en/BLM_Programs/oilandgas/oil_and_gas_lease/2014/may_2014_lease_sale.html) and in the public room at the Kremmling Field Office. The documents may be viewed at the field office during regular business hours (7:45 a.m. to 4:30 p.m.), Monday through Friday, except holidays. Comments should be sent to [blm\\_co\\_kr\\_webmail@blm.gov](mailto:blm_co_kr_webmail@blm.gov) by close of business on December 30, 2013. Comments received from the public will be reviewed and incorporated into the EA as appropriate.

## **CHAPTER 2 – ALTERNATIVES**

### **2.1 INTRODUCTION**

This chapter describes the alternatives analyzed in detail. Alternatives considered but not analyzed in detail are also discussed.

### **2.2 ALTERNATIVES ANALYZED IN DETAIL**

#### **2.2.1 No Action Alternative**

The BLM NEPA Handbook (H-1790-1) states that for EAs the No Action Alternative generally means that the Proposed Action would not take place. In the case of a lease sale, the leasing of particular parcels would not take place.

Under the No Action Alternative, the BLM would defer all nominated lease parcels from the June 2014 lease sale. The parcels could be considered for inclusion in future lease sales. Surface management would remain the same and ongoing oil and gas development would continue on surrounding private, state, and federal leases.

#### **2.2.2 Preferred Alternative**

Under the preferred alternative, the BLM would offer 2,566.94 acres, 804.14 BLM surface and 1,762.80 private surface, for lease and defer 37,340.392 acres from the sale. Attachment B lists all parcels or portions of parcels that would be deferred from the lease sale under the preferred alternative. Attachment C lists all parcels determined by this analysis to be available for lease from the preferred alternative with applied stipulations. Attachment D contains descriptions of the applicable stipulations, and Attachment F contains maps of the parcels.

Justification for deferrals: The deferral process for nominated parcels was established to address situations in which legitimate questions or controversy arises over the leasability of a parcel. The deferral process does not necessarily withdraw a parcel from the leasing arena, but merely indicates that further analysis is needed before possibly being reintroduced in a future lease sale.

## **2.3 ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL**

### **2.3.1 Lease All Nominated Parcels in Conformance with the RMP**

The BLM considered, but eliminated from detailed analysis, an alternative that would lease Federal mineral estate in all 34 nominated parcels available for leasing in the resource area in accordance with the KFO RMP (1999). The current lease sale includes parcels in Jackson County. Those lands proposed for lease under this alternative total 39,907.332 acres of federal mineral estate and include a combination of federal and private surface (see Attachment A). The lands would be 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 the RMP. These stipulations are described in Attachment A.

This alternative is eliminated from further analysis due to inconsistency with existing policy and connection to ongoing planning efforts. The BLM CO has identified a need to defer leasing in Preliminary Priority Habitat for Greater Sage Grouse and initiated a Greater Sage Grouse RMP Amendment to analyze the potential impacts of land management activities on the ESA candidate species. Thirty-three parcels are located in Preliminary Priority Habitat for Greater Sage Grouse as identified by Colorado Parks and Wildlife. In accordance with BLM CO IM 2010-028 "BLM Colorado will continue to defer fluid mineral lease nominations in core sage-grouse habitat until management prescriptions and strategies outlined in species conservation plans . . . and potential impacts to local sage-grouse populations as summarized in recent/existing research studies have been evaluated and/or adopted through RMP revisions or amendments. It is the policy of the BLM Colorado State Office to defer leasing of core Sage Grouse habitats until FO Plan Revisions have been completed, as these documents detail significant new information on Sage Grouse not addressed in our current plans. Deferral is necessary not to affect decisions related to future management actions."

## **2.4 PLAN CONFORMANCE REVIEW**

The proposed action was reviewed for conformance (43 CFR 1610.5, BLM 1617.3) with the following plan:

Name of Plan: Record of Decision for the Kremmling Resource Management Plan

Date Approved: 1984 and amended in 1999

Decision Language: The RMP designated approximately 380,000 acres of federal mineral estate open for continued oil and gas development and leasing. The RMP (with associated amendments) also describes specific stipulations that would be attached to new leases offered in certain areas. Under the action alternatives, parcels to be offered are in areas designated as "open" to leasing in the RMP, and would be leased subject to stipulations prescribed by the RMP. Therefore, the alternatives considered conform to the



fluid mineral leasing decisions in the RMP and subsequent amendments, and are consistent with the RMP's goals and objectives for natural and cultural resources.

## **CHAPTER 3 – AFFECTED ENVIRONMENT AND EFFECTS**

### **3.1 INTRODUCTION**

The CEQ Regulations state that NEPA documents “must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail” (40 CFR 1500.1(b)). While many issues may arise during scoping, not all of the issues raised warrant analysis in an EA. Issues will be 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 direct, indirect, or cumulative impact, or where analysis is necessary to determine the significance of the impacts. The following resources were determined to not be present or not expected to be impacted by the proposed action and alternatives: Flood Plains, Hydrology, Fire Management, Environmental Justice, Cadastral, Access and Transportation, Prime and Unique Farmlands, Areas of Critical Environmental Concern, Wilderness and Lands with Wilderness Characteristics, Wild and Scenic Rivers and Scenic Byways.

### **3.2 ENVIRONMENTAL CONSEQUENCES OF THE NO ACTION ALTERNATIVE**

The No Action Alternative is used as the baseline for comparison of the alternatives. Under the No Action Alternative, the 34 parcels totaling 39,907.332 acres would not be leased. There would be no subsequent impacts from oil and/or gas construction, drilling, and production activities. The No Action Alternative would result in the continuation of the current land and resource uses in the proposed lease areas.

The BLM assumes that the No Action Alternative (no lease option) may result in a slight reduction in domestic production of oil and gas. 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. The public's demand for oil and gas is not expected to change; oil and gas consumption is driven by a variety of complex interacting factors including energy costs, energy efficiency, availability of other energy sources, economics, demographics, and weather or climate. If the parcels are not leased, energy demand would continue to be met by other sources such as imported fuel, alternative energy sources (e.g., wind, solar), and other domestic fuel production. This displacement of supply could offset any reductions in emissions and disturbance achieved by not leasing the subject tracts in the short term.

### **3.3 PAST, PRESENT AND REASONABLY FORESEEABLE ACTIONS**

NEPA requires federal agencies to consider the cumulative effects of proposals under their review. Cumulative effects are defined in the Council on Environmental Quality (CEQ) regulations 40 CFR §1508.7 as “the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency . . . or person undertakes such other actions.” In its guidance, the

CEQ has stated that the “cumulative effects analyses should be conducted on the scale of human communities, landscapes, watersheds, or airsheds” using the concept of “project impact zone” (i.e., the area that might be influenced by the proposed action).

Offering and issuing leases for the subject parcels, in and of its self, would not result in cumulative impacts to any resource. Nevertheless, future development of the leases could be an indirect effect of leasing. The RMP/EIS provides the BLM’s analysis of cumulative effects of oil and gas development based on the reasonable, foreseeable oil and gas development scenario. This analysis is hereby incorporated by reference and is available at: <http://www.blm.gov/co/st/en/fo/kfo.html>

The cumulative impacts analysis in the RMP/EIS accounted for the potential impacts of development of lease parcels in the planning area as well as past, present and reasonably foreseeable actions known at that time. This analysis expands upon the RMP/EIS analysis by incorporating new information.

The area of influence for a lease is generally the Natural Resources Conservation Service (NRCS) 6<sup>th</sup> Level Watershed, but may vary by resource (see the affected environment sections). The following activities will be considered in the cumulative impacts analysis of each alternative.

### **Past Actions**

There has been sporadic development in Jackson County. Infrastructure in the form of County roads, electrical lines and gas lines abound in these areas but there are no pipelines for transporting oil and gas resources. Jackson County has a long history of oil and gas drilling and production activity, with nearly 680 wells drilled since the early 1920’s. Since 2000, approximately 70 wells have been drilled in Jackson County, mostly as fill in wells in the more northern portion of the basin in the McCallum Field. Recreation occurs in Jackson County mostly in the form of hunting and OHV riding. Ranching is the largest industry in the area.

### **Present Actions**

There are 131 oil and gas leases equaling 145,942.51 acres leased at this time in Jackson County. Currently there are over 40 injection wells and about 70 production wells, most of which are in the McCallum Field, North Parks’ largest oil and gas field located north and west of the town of Walden. Surface disturbance associated with the current level of infrastructure is approximately 1,350 acres. Ranching and recreation continues to be the largest use of the land in the county. There is one BLM permitted outfitter using the area. Weed infestations in the area are being treated by the county and BLM.

### **Reasonably Foreseeable Future Actions**

Grazing and recreation are expected to continue with recreation on the increase as it is for the entire state. Oil and gas exploration continues sporadically in Jackson County. According to the Reasonable Foreseeable Development report (RFD), there is low potential for oil and gas development in the location of the Jackson County parcels (BLM, 2008). With the advent of new technology, however, successful development may occur where it would not have in the past. Over the past year, two Federal wells were approved by the KFO and developed east of Parcel

6795, KFO has also recently received APDs for two other wells in this general vicinity. Throughout North Park, it is anticipated that about 370 additional wells will be drilled over the next twenty years; approximately 190 of those will be federal wells, with the remaining wells drilled on private lands, total anticipated surface disturbance associated with this level of development activity is expected to fall between 1,350 – 4,310 acres. The RFD may be referenced at: [RFD BLM 2008](#).

## **3.4 ENVIRONMENTAL CONSEQUENCES OF LEASING AND POTENTIAL DEVELOPMENT**

### **3.4.1 Physical Resources**

#### **3.4.1.1 Air Quality and Climate**

Affected Environment: Air pollution control programs are based on a combination of federal and state legislation. The Clean Air Act (CAA) is the primary federal legislation; additional state air quality management authority is based upon state legislation. The U.S. Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS) for several different pollutants, which are often referred to as criteria pollutants, including ozone, nitrogen dioxide, carbon monoxide, sulfur dioxide, suspended particulate matter, and lead. Standards for suspended particulate matter have been set for 2 size fractions: inhalable particulate matter (PM<sub>10</sub>), and fine particulate matter (PM<sub>2.5</sub>). Additionally, Hazardous Air Pollutants (HAPs), which are suspected to cause cancer or other serious health effects, are regulated under the Clean Air Act (CAA); however, ambient air quality standards have not been set by the EPA.

The Colorado Air Quality Control Commission (CAQCC) has adopted state ambient air quality standards that, generally, are equal to current or former federal standards. The Air Pollution Control Division (APCD) of the Colorado Department of Public Health and Environment (CDPHE) implements regulatory and planning programs based upon state and federal regulations. The CDPHE issues air quality permits for many stationary sources. For stationary sources in attainment/maintenance areas, the pollutant specific uncontrolled actual emissions permitting thresholds are 200 pounds per year (Pb), 5 tons per year (PM<sub>2.5</sub>, PM<sub>10</sub>, VOC) and 10 tons per year (CO, SO<sub>x</sub>, NO<sub>x</sub>). In nonattainment areas, the thresholds are 200 pounds per year (Pb), 1 ton per year (PM<sub>2.5</sub>, PM<sub>10</sub>), 2 tons per year (VOC), and 5 tons per year (CO, SO<sub>x</sub>, NO<sub>x</sub>). However, CDPHE does not issue permits for mobile sources or for portable and stationary sources that emit less than the threshold quantities of regulated pollutant. The CAA, as well as FLPMA, requires the BLM and other federal agencies to comply with local, state, Native American tribal, and other federal agencies air quality standards and regulations. FLPMA further directs the Secretary of the Interior to take any action necessary in order to prevent unnecessary or undue degradation of the lands [Section 302 (b)], and to manage the public lands “in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values” [Section 102 (a)(8)].

The Intergovernmental Panel on Climate Change (IPCC) has stated, “Most of the observed increase in global average temperatures since the mid-20th century is very likely due to the

observed increase in anthropogenic [man-made] GHG concentrations” (IPCC 2007). The general consensus is that as atmospheric concentrations of greenhouse gases (GHGs) continue to rise, average global temperatures and sea levels will rise, precipitation patterns will change, and climatic trends will change and influence the Earth’s natural resources in a variety of ways. Secretarial Order 3289 directs the BLM to address the impacts of climate change on America’s water, land, and other resources.

Currently, the North Park area has no identified air quality concerns, and based on known general emission levels and information for the area, is considered likely to be meeting air quality standards. North Park is bordered by three designated air quality management areas which are Prevention of Significant Deterioration (PSD) Class I areas- the Mt. Zirkel Wilderness Area to the west, the Rawah Wilderness Area to the east, and Rocky Mountain National Park to the southeast. The prevalent winds are from the southwest to the northeast for most of North Park. There is an air quality monitoring station that has been established near the northern end of the park that measures ozone, sulphur dioxide, carbon monoxide, particulate matter, and nitrogen oxides and a monitoring station in the Mount Zirkel Wilderness. The leases are all less than five miles east of the Zirkel Wilderness Area, with the exception of Leases 6795 which is eight miles to the southeast. The Rawah Wilderness Area is between 20 to 30 miles east of the leases and Rocky Mountain National Park is approximately 30 to 40 miles to the southeast.

Environmental Consequences of Leasing and Potential Development (Direct and Indirect Impacts): Based upon the general existing data, PM (primarily in the form of fugitive dust during wind events) and regional ozone are the pollutants of concern for the leases. Emission of NO<sub>x</sub> and VOCs, while unlikely to create localized air quality problems within the general area, are also of concern due to their role in regional ozone formation as precursor gases. The actual sale of the leases would have no direct impact on air quality or climate change. Lease development activities could produce PM<sub>10</sub>, PM<sub>2.5</sub>, nitrogen oxides, volatile organic compounds (VOCs), carbon monoxide, sulphur oxides, and greenhouse gas (GHG) pollutants due to vegetation removal, vehicle travel on paved and unpaved roads, and energy development. Fuel combustion in vehicle engines and equipment produces the reactive organic compounds, nitrogen oxides, carbon monoxide, PM<sub>10</sub>, PM<sub>2.5</sub>, and GHG emissions. Vehicle travel on unpaved roads generates fugitive dust that contains PM<sub>10</sub> and PM<sub>2.5</sub>. The clearing of vegetation from roads and pads results in increased wind erosion from unreclaimed surfaces, producing PM<sub>10</sub> and PM<sub>2.5</sub>. Wells may be drilled during exploration. If the area is for natural gas development, gas may be flared and/or vented to evaluate the characteristics and potential of the resource available. Volatile organic compounds (VOCs) would also be released from the reserve pit or tanks and during completion activities.

The potential air quality impacts are very dependent on which lease parcels are developed, if any, and to what extent and where that development occurs. Even with these increased pollutants, development of only the offered lease parcels is unlikely to exceed NAAQ and CAAQ standards or other significant impact thresholds. If any one of the parcels is developed, it is unlikely that any measurable impact to climate change would occur. If leases 6824 and 6825 are developed, the distances to the Mt. Zirkel Wilderness Area and the high wind erodibility indexes for the mapped soils indicate that more specific air quality analysis and modeling may be appropriate at the APD level, when specific locations and designs could be used in predictive

models. Any proposed lease development would be subject to applicable local, State, and Federal air quality laws and regulations. Additional conditions of approval could be applied at the development stage to help reduce emissions and to protect air quality.

Environmental Consequences of Leasing and Potential Development (Cumulative Impacts):

Currently, there are no permitted active wells on the lands between leases 6825, 6824, and 6801. Emissions in the area are primarily those associated with vehicles travelling on dirt roads, and wood burning stoves from scattered residences. Parcel 6801 would also have potential emissions from logging activities on or west of the parcel associated with vehicle and equipment emissions. Between proposed leases 6801 and 6802 are several operating wells, located north of 6802. Lease 6802 also has some active wells to the south and southwest of its location. Allotment 6795 has several wells located to the northeast. There is a potential to have future increases in energy development on existing leases or future leases. Other emissions include vehicle emissions, travel on paved and unpaved roads, wood burning stoves, and livestock grazing. Due to the potential to impact the Mount Zirkel Class I area, additional monitoring could be required in conjunction with environmental analysis (in accordance with NEPA) prior to authorization for any development on the leases. Any proposed development on the leases would be in accordance to the 2011 Memorandum of Understanding between the Department of Interior, Department of Agriculture, and the Environmental Protection Agency regarding air quality analyses and mitigation for federal oil and gas decisions through the NEPA process. COAs may need to be required for specific projects based upon the site specific analysis, as well as on analysis from other modeling being done now or in the future.

Research has identified the general potential impacts of anthropogenic greenhouse gas emissions and their effects on global climatic conditions. These anthropogenic GHGs include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and several trace gases which differentially absorb and emit thermal radiation in the atmosphere and therefore may contribute to climate change. Current research on climate change impacts is an emerging and rapidly evolving area of science, and given the lack of adequate analysis methods, it is not possible to identify reasonably foreseeable local, regional, or global climate change impacts based on assumed potential GHG emissions. Changes in global temperatures and climate vary significantly with time, and are subject to a wide range of driving factors and complex interrelationships, the level of GHG emissions can generally be quantified and compared to overall estimates to provide some measures of the level and significance of any potential impacts. Oil and/ or gas may be developed and produced as part of the proposed lease sale and subsequently utilized to produce energy. The specific GHG impacts associated with the development of the oil and gas resources would be addressed in a subsequent environmental analysis.

Mitigation: If parcels are leased, and are proposed for development, then a site specific review of the proposed development would be done. Depending on the amount and location of development, emission inventories or air quality modelling may be required to better determine possible air quality impacts. If the additional review identifies pollutant levels of concern, then BMPs to reduce those emissions would be required. For example, if particulate levels are a concern, then surfacing of roads or multiple wells per pad or reclamation to reduce dust may be required.

### 3.4.1.2 Minerals/Fluid

Affected Environment: The nominated parcels are all located in Jackson County, within favorability zone 2 (area estimated to have low oil and gas potential, due to specific indications that one or more of the following are not present: (a) source rock, (b) thermal maturation, and (c) reservoir strata possessing permeability and/or porosity, and (d) traps). Site specific geologic formations would be analyzed during the APD NEPA process.

Historically, three wells were drilled within the Township and Range of Parcel 6825, none were productive. The Township and Range of Parcel 6795 has had nine wells drilled, seven were never productive and two are within their initial stages of development. The Township and Range of Parcels 6824, 6801 and 6802 has had nearly 40 wells drilled, nearly half are productive and are located in the Lone Pine Field.

#### Environmental Consequences of Leasing and Development - Direct and Indirect Impacts:

Preferred Alternative: Sale of the proposed lease parcels would allow development and recovery of oil and natural gas resources in the underlying oil and gas bearing formations. Leased parcels could lead to the development of recoverable natural gas and oil resources, making revenues available to federal, state, and local treasuries.

Environmental Consequences of Leasing and Development - Cumulative Impacts: No wells have ever been drilled within the boundaries of the five parcels. However, there are approximately 10 wells active within their general vicinity, eight are in production, and the KFO has recently received APDs for two more. Depending on the site specific geology underlying the parcels, new development could occur. If the lease parcels were developed, drilling of oil and gas wells would further deplete the hydrocarbon resources of the targeted formations.

Potential Future Mitigation: None.

### 3.4.1.3 Soils

Affected Environment: The Jackson County Soil Survey, the Colorado Geologic Society Landslide Maps, and a 10 m digital elevation map were used to develop a general summary of the soils within each proposed lease parcel. Reviewing what the potential soil types are within the proposed leases and how surface disturbances similar to lease development affect these soils help identify the potential soil impacts and needed conditions of approval to protect long-term soil health under the Proposed Action, Preferred Alternative, and No Action Alternative. The following table summarizes the soil concerns in each parcel:

<b>Parcel</b>	<b>Range Sites associated with Soil Mapping Units</b>	<b>Soil Limitations</b>
6795	Mountain Shale Woodland Badland	Landslides- N2N2 Sec 3 Severe water erosion hazard & Highly wind erodible- S2N2 Sec 3
6801	Woodland	None

Parcel	Range Sites associated with Soil Mapping Units	Soil Limitations
	Stony Loam Mtn Meadow Mtn Loam	
6802	Rocky Loam Rock land	None
6824	Rocky Loam Rock Outcrop Dry Exposure	Highly wind erodible- Sec. 4 Severe water erosion hazard Steep slopes- Sec. 15
6825	Rocky Loam Rock Outcrop Dry Exposure	Highly wind erodible

Most of the proposed parcels have low to moderate slopes, with steeper slopes occurring in Sections 10 and 15 of lease 6824.

Environmental Consequences of Leasing and Development - Direct and Indirect Impacts: If the proposed leases are sold, the actual amount of soil disturbance and the locations of the disturbance associated with lease development would determine the expected soil impacts. Development could involve the construction of access roads and well pads, with possible reserve pits on the pads. Offsite impacts, if any, are also difficult to determine until lease development information is known. Typical offsite impacts could involve increased road traffic, fugitive dust, runoff from lease disturbances, including petroleum contamination to offsite soils. The leases would have CSU CO-27 applied, which would require an engineering/reclamation plan prior to surface disturbances of slopes greater than 40 percent. The surface plan is intended to address reducing soil erosion, slope failure, and protecting the long-term site productivity. During the APD stage, additional conditions of approval might be needed to reduce soil loss from the construction and use of roads and drilling pads on slopes less than 40 percent and on highly erodible soils. For example, as vegetation layers are removed, many of the parcels are particularly vulnerable to wind erosion. Areas with dry exposures may be difficult to reclaim, as the undisturbed soils are not well vegetated. Minimizing disturbances on these soils would be recommended. To protect air quality and the site's revegetation potential, additional best management practices may be required.

Environmental Consequences of Leasing and Development - Cumulative Impacts: The cumulative effects of leasing these parcels are dependent on the actual amount of development and the locations of surface disturbances.

Potential Future Mitigation: Depending on the proposed lease development, if any, there could be additional conditions of approval to help reduce the amount of surface disturbance, to avoid areas that are difficult to stabilize or revegetate, and to reduce wind and water erosion.

### 3.4.1.4 Groundwater

Affected Environment: North Park's geology is varied and most groundwater is associated with the alluvium along the major river corridors. The National Wetland Inventory, aerial photographs, and the state of Colorado's Division of Water Resources' records were used to identify potential groundwater sources such as seeps, springs, and wells located on or near the parcels. Parcel 6825's ponds appear to be primarily surface water. Parcel 6824's wetlands appear to be fed at least in part by groundwater as are Parcel's 6801's kettle ponds and wetlands. Parcel 6795's pond also appears to have a groundwater source. The state's Division of Water Resources records the following groundwater sources:

T. 9 N. 81 W.

Section 3:

NENW- domestic well, 60 feet total depth, 50-60' perforated pipe

NWNW- domestic well, 143 feet total depth

SWSE- domestic well, 300 feet total depth, 210-300' perforated pipe

NESW- domestic well, 450 feet total depth, 150-210', 310-410' perforated pipe

Section 10:

SEnw- developed spring- irrigation, 1.25 cfs water right

NESW- developed spring- irrigation, 0.25 cfs water right

SEnw- domestic spring- 0.033 cfs water right

Section 18:

SESW- domestic well- infiltration gallery developed

(1000' dry hole, variance to collect in surface alluvium)

Section 20:

SEnw- domestic, stock water wells-

110 feet total depth, 50-90' perforated pipe

40 foot total depth

The groundwater sources are fairly shallow and down gradient from the proposed leases.

#### Environmental Consequences of Leasing and Development - Direct and Indirect Impacts:

Impacts to groundwater could occur due to failure of well integrity, failed cement, surface spills, and/or the loss of drilling, completion, and hydraulic fracturing fluids into groundwater. Types of chemical additives used in drilling activities may include acids, hydrocarbons, thickening agents, lubricants, and other additives that are operator and location specific. Concentrations of these additives also vary considerably and are not always known since different mixtures can be used for different purposes in gas development and even in the same well bore. There are no available lease stipulations to protect groundwater quality in the current Resource Management Plan (RMP). Seeps' and springs' immediate source areas are protected by the CSU CO-28 for riparian/wetland areas by moving disturbances away from the source to outside the wetland vegetation. During the APD stage, all potential freshwater zones are identified in the drilling plan, along with known wells and springs. The BLM's and the state of Colorado's development requirements for the well's casing, cementing, testing, and reporting help protect all freshwater zones that could be impacted by drilling operations, reducing the likelihood of groundwater impacts. Additional conditions of approval could be applied at the lease development stages to



increase the protection to the developed springs, undeveloped seeps, and overall groundwater quality and uses, such as requiring closed loop systems and the disclosure of drilling fluids to be used during drilling operations.

Environmental Consequences of Leasing and Development - Cumulative Impacts: Some oil and gas activity is already occurring with the general areas of the leases. There could be potential future development in addition to these leases, but cumulative impacts would not necessarily be expected to occur. Freshwater zones of groundwater are protected each time a well is drilled and contamination would only be expected due to accidents or failures.

Potential Future Mitigation: Additional conditions of approval could be applied depending on the specific plans for lease development to increase distance to domestic water sources, to monitor groundwater quality, and to require the disclosure of drilling fluids.

### **3.4.1.5 Surface Water**

Affected Environment: The proposed leases are all located within the North Platte River basin. Parcel 6795 includes the watershed divide between the Upper North Platte River 5<sup>th</sup> order watershed and the Grizzly Creek 5<sup>th</sup> order watershed. The headwaters of Cow Creek are within the southern portion of the parcel, which flows to the south and is tributary to Anderson Draw, a tributary to Grizzly Creek. The northern portion of the lease is tributary to an unnamed tributary of Little Grizzly Creek. Both Little Grizzly Creek and Grizzly Creek are classified by the state of Colorado for coldwater aquatic life- class 1, water supply, agriculture, and recreational uses. Little Grizzly Creek and Grizzly Creek are on the state's Monitoring and Evaluation List for possible water quality impairments. Little Grizzly Creek is listed for E. coli, Iron (Fe (Trec)), and aquatic life use; Grizzly Creek is listed for possible aquatic life use impairment. The original aquatic life listings of these streams were based primarily on a qualitative assessment of the streams- muddy water, embedded substrate, large depositions of fine silt, and poor fish population numbers. The Jackson County, Colorado Draft Nonpoint Source Watershed Protection Plan (OMP, 2012) reviewed the existing data for both streams, and although the greatest sediment load appears to be in the upper portions of the streams, additional data collection is needed to determine if impairment exists, for what segments of the stream, and the source of impairment, if any. The lease parcel has been assessed by an interdisciplinary team for land health standards, and there were no concerns identified. The parcel has good vegetative cover and no areas of accelerated erosion were observed. There is no reason to suspect the parcel as being a contributor to water quality concerns downstream.

The rest of the parcels are within the Lake Creek/North Fork of the North Platte River 5<sup>th</sup> order watershed. The streams are classified for water supply, agriculture, coldwater aquatic life-class 1, and recreation. Parcel 6801 contains segments of Lone Pine Creek and Dry Creek, and the 40 acres of Parcel 6824 in Section 19 also contains a segment of Lone Pine Creek. Both streams flow a little more than a mile before joining the North Fork of the North Platte River. There are no identified water quality concerns for the two tributary streams or for the river. The larger 6824 parcel does not contain any perennial streams, but does include a private reservoir constructed on an intermittent draw. The draw is tributary to the North Fork of the North Platte River. Parcel 6825 contains a freshwater pond that is located in a small sink between Boettcher

Ridge to the west and an unnamed outcrop to the east. Only a small portion of the parcel could be tributary to ponds or drainage offsite of the parcel, and if runoff left the parcel, it would be intercepted by irrigation ditches.

Environmental Consequences of Leasing and Development - Direct and Indirect Impacts: Lease development's potential impacts to surface water quality are generally associated with the amount and location of surface disturbances, and the potential to increase runoff and sediment loading in streams. Removal of vegetation and duff layers expose soil to water erosion, creating runoff pathways that transport sediment to surface waters. Surface disturbances such as road construction also increase the amount of impermeable surfaces (compaction), which increase the amount of runoff and can shorten runoff pathways. Transport of chemicals and products could potentially affect water quality anywhere along the route if accidental discharges were to occur. The proposed leases would all have the CSU CO-28 applied, which moves development beyond the riparian vegetation zone. This allows the riparian vegetation to act as a buffer strip of undisturbed vegetation to encourage sediment deposition within the floodplain and to not reach surface waters. In areas of steep slopes, CSU CO-27 would be applied to require a plan that controls erosion and promotes good revegetation for surface disturbances. This reduces soil transport from disturbances, which indirectly protects water quality. Depending on the actual proposed lease development and locations, additional conditions of approval could be applied to site specific NEPA to further protect surface water quality.

Due to the actual runoff pathways and distances, most disturbances would be less likely to affect downstream receiving waters, such as the North Fork of the North Platte River, than potentially the immediate drainages such as Lone Pine Creek. E. coli concentrations would not be directly increased by energy development, but could be indirectly increased if increased runoff and erosion reach surface waters, assuming the soils currently have high E. coli levels. Most of the soils would also not be expected to have high iron concentrations. Stormwater controls could be applied at the lease development stage to help keep runoff from reaching live waters.

Environmental Consequences of Leasing and Development - Cumulative Impacts: Water quality impacts to the Grizzly Creek and the North Fork of the North Platte River drainages are primarily associated with agricultural uses and wildlife uses. These uses may result in some increased streambank erosion and sediment transport due to trails and vegetation removal, generally in small localized areas. Leasing the parcels would increase the amount of surface disturbance and could lead to increased erosion, potentially impacting surface water quality, depending on the actual amount and location of the development. Additional drilling could occur within the general areas of the leases, with some potential increases in sediments reaching the stream.

Potential Future Mitigation: If and when a lease is proposed for development, best management practices and conditions of approval would be required to protect surface water quality and uses.

## **3.4.2 Biological Resources**

### **3.4.2.1 Forestry & Forest and Woodland Vegetation**

Affected Environment: Four of the five parcels identified in the preferred alternative contain forest resources, with only parcel 6825 being completely devoid of trees. There is substantial variation in the quantity and distribution of trees found in the four parcels that have forest resources. Small patches of aspen are found in parcel 6824, although in aggregate, they occupy only about nine percent of the area. Parcel 6802 contains one two acre patch of aspen, however, individual trees are scattered over a much larger portion of the area. Stands of aspen and lodgepole pine occupy about 59 percent and 71 percent, respectively, of parcels 6795 and 6801. Most of the lodgepole pine stands in parcels 6795 and 6801 are mature stands, primarily comprised of trees that are approximately 110 to 130 years old. These mature stands have recently experienced a severe mountain pine beetle (MPB) infestation with mortality rates averaging between 80 to 95 percent. Many of the mature lodgepole pine stands in parcel 6801 have been recently harvested by the private landowner. Other coniferous species, primarily subalpine fir and Douglas-fir, are found as single individuals or in small groups within at least some of the stands of the predominant species.

#### Environmental Consequences of Leasing and Development - Direct and Indirect Impacts:

Impacts to forest or woodland vegetation are dependent on the amount and location of lease development. Impacts to forest and woodland vegetation in parcels 6824 and 6802 are likely to be negligible due to the small percentage of area occupied by trees in these parcels. It is expected that lease developers would avoid small patches of trees and impacts, if any, would be restricted to the removal of individual trees.

Assuming that development occurs within the forested portion of parcels 6795 and 6801, direct impacts would likely be limited to tree felling associated with the development of well pads and access roads. Trees immediately adjacent to well pads and access roads may be indirectly impacted from a number of factors including increased dust from development and use, soil compaction, spills of petroleum or other liquids, etc., potentially resulting in increased levels of stress on affected trees. Increased stress on affected trees would likely result in increased vulnerability to drought, insects and disease.

Although trees may be cut if development of leases occurs in forested areas in the parcels, management of forest and woodland resources, overall, would likely be only marginally affected. If it is necessary to cut trees in order to develop leases on public lands managed by the BLM within the parcels, lessees would be required to obtain a contract, and pay for the trees to be cut, prior to cutting any tree. On private lands within the parcels, the lessee would need to negotiate with the private landowner.

Environmental Consequences of Leasing and Development - Cumulative Impacts: Some recent logging of beetle-killed lodgepole pine has occurred on private land within parcel 6801. Reasonably foreseeable future actions affecting forest and woodland vegetation may include additional salvage within lodgepole pine stands in parcel 6801 or 6795, or both. Lease development of the parcels, due to the limited number of acres of forest and woodland vegetation

that would likely be impacted, is not expected to contribute substantially to cumulative effects. Cumulative impacts to forests and woodlands would be limited to those areas developed for well pads and access roads, and possibly forested areas immediately adjacent to those areas. Well pads and access roads would be kept in a treeless state for the duration of oil or gas extraction. Trees would eventually become re-established once oil and gas activities are complete and sites have been reclaimed. Cumulative impacts to forest and woodland management would be negligible.

Cumulative Effects: There would be no additional contribution to previous, existing, or future disturbances as a result of implementing this alternative.

Potential Future Mitigation: Proposed mitigation measures, including reclamation practices, are developed upon environmental analysis of a site specific APD.

### **3.4.2.2 Invasive/Non-Native Species**

Affected Environment: Currently within parcel #6824 and #6795 in Jackson County several species of noxious weeds are present, which include:

- Houndstongue (*Centaurea maculosa*);
- Canada thistle (*Cirsium arvense*);
- and Musk thistle (*Carduus nutans*).

A small population (less than 2 acres) of Houndstongue, Musk Thistle, and Canada thistle was discovered in the 2009 invasive species inventory on Parcel #6824. Since then, the noxious weed population has been chemically treated and contained to only a few sporadic plants within the infestation area. Due to the discovery of this small infestation all areas within BLM administered lands around this parcel were intensively inventoried/treated for invasive, noxious species. It was found that Canada thistle, Houndstongue, and Musk thistle occur only sporadically along roadsides and within aspen stand areas. No other significant populations of invasive species (greater than one acre) were found within the above leasing parcels. Parcel 6795 was inventoried in 2008 and few sporadic populations of Houndstongue and Canada thistle populations were found along roadsides. These populations were treated chemically by both the Jackson County Weed Program and BLM personnel since 2008.

Currently there are no known invasive or noxious species present in Parcels 6801, 6802, and 6825 in Jackson County.

#### Environmental Consequences of Leasing and Development- Direct and Indirect Effects:

Detailed direct and indirect impacts associated with Invasive Non-Native species cannot be predicted at the leasing stage. These impacts would be analyzed at the APD level in which COA's would be implemented to mitigate any potential spread of invasive, noxious species. However since there are invasive, noxious weeds present soil and vegetation disturbance from future development may increase the chances of these species to spread and outcompete the native vegetation within the parcels. Generally invasive, noxious weeds thrive in newly disturbed areas and can easily out-compete native vegetation. Oil and gas development provides avenues for invasive species to spread which include such actions as building new roads and associated pads which create vegetation and soil disturbance. Indirectly, development may introduce current

or new species into the area by way of construction equipment, vehicles, and personnel in which seeds are brought into the newly disturbed areas. These types of impacts are addressed at the APD Level in which specific COA's are implemented for invasive species mitigation depending on the needs of that specific site or development.

Environmental Consequences of Leasing and Development Cumulative Effects: Future development within the proposed lease sale parcels may result in additional vegetation loss and surface disturbance therefore creating more avenues for invasive, noxious weeds to establish or spread. There is limited past and present oil and gas activity occurring within the parcel areas. The cumulative effects would have to be determined once the amount of development and associated disturbance is determined. A more accurate cumulative impact analysis would have to be addressed at the more site specific APD stage.

Potential Future Mitigation: Principles of integrated pest management, including herbicide application, may be employed to control and minimize noxious and invasive weeds. Proposed mitigation measures, including noxious and invasive weed control, would be developed upon environmental analysis of each site specific APD.

### **3.4.2.3 Migratory Birds**

Affected Environment: BLM Instruction Memorandum No. 2008-050 provides guidance towards meeting the BLM's responsibilities under the Migratory Bird Treaty Act (MBTA) and Executive Order (EO) 13186. The guidance emphasizes management of habitat for species of conservation concern by avoiding or minimizing negative impacts and restoring and enhancing habitat quality.

The proposed lease parcels encompass a wide variety of habitats, including mountain big sagebrush (6825, 6824, 6802, and portions of 6801, 6795); and mixed conifer and aspen forests (parcels 6801 and 6795). Riparian communities are present in several of the parcels (see Wetland and Riparian Zones section). These habitats support a large array of migratory birds during the breeding season (generally May through July).

The BLM lends increased management attention to migratory birds listed by the U.S. Fish and Wildlife Service (FWS) as Birds of Conservation Concern (BCC). These are bird populations that monitoring suggests are undergoing range-wide declining trends and are considered at risk for becoming candidates for listing under the Endangered Species Act if not given due consideration in land use decisions. Those species associated with the Southern Rockies/Colorado Plateau region (FWS 2008a) and the proposed lease parcels are presented by habitat affiliation below.

BCC associated with sagebrush shrubland habitats are limited to the BLM-sensitive Brewer's sparrow, which is addressed in the Special Status Species section and burrowing owl.

Conifer and aspen forests support nesting Cassin's finch in greater abundance than in lower elevation woodlands as well as Golden eagles. Cliff habitat supports peregrine falcons

(addressed in the Special Status Species section) and prairie falcons. Riparian and wetland communities support willow flycatcher, veery, and American bittern.

More generally, birds associated with these lease parcels are well distributed in extensive suitable habitats throughout the KFO and northwest Colorado and habitat-specific bird assemblages appear to be composed and distributed appropriately to the normal range of habitat variability.

Environmental Consequences of Leasing and Development - Direct and Indirect Impacts:

The actual lease sale would not impact any migratory bird species or their habitat, however, potential future development of the proposed leased parcels would influence both localized populations and their associated habitats. The potential effects of lease development on migratory birds are represented by the discussion for Brewer's sparrow in the Special Status Species section.

Environmental Consequences of Leasing and Development - Cumulative Impacts:

Cumulative effects would be similar to those discussed in Special Status Species section.

Potential Future Mitigation: In general, mitigation measures would be developed through an environmental analysis of a site specific application for permit to drill. Mitigation that is effective in reducing the duration or severity of impacts to migratory birds is presented with the discussion for Brewer's Sparrow in the Special Status Species section. Further, it is standard procedure to include a COA on all APDs that alerts the operator to their responsibility under the Migratory Bird Treaty Act to effectively preclude migratory bird access to, or contact with, reserve pit contents that possess toxic properties (i.e., through ingestion or exposure) or have potential to compromise the water-repellent properties of birds' plumage.

#### **3.4.2.4 Special Status Plants and Animals**

Affected Environment: Federally listed threatened, endangered, and candidate species that occur in Jackson County include:

- North Park phacelia,
- Canada lynx,
- North American Wolverine,
- Greater sage-grouse.

Several BLM-sensitive animal species are known to inhabit or may be indirectly influenced from development of the proposed lease parcels, including:

- Bald Eagle
- American peregrine falcon
- American white pelican
- northern goshawk
- Brewer's sparrow
- white-tailed prairie dog
- Townsend's big-eared bat
- northern leopard frog.

North Park phacelia: The proposed parcels do not contain any currently known North Park phacelia populations. Parcels 6825, 6824, 6802, and 6795 are within the boundaries identified for possible Section 7 Consultation with the Fish and Wildlife Service. Hence, these parcels may potentially contain North Park phacelia populations since they have not been previously surveyed for this plant or its associated habitat. The closest known phacelia populations range from 4 miles to 14 miles from the parcels. Development in these parcels may require special status plant surveys.

Canada lynx: No parcels are within Lynx Analysis Units (LAU). Lynx prefer uneven-aged stands of coniferous forest with relatively open canopies and well-developed understories for their prey, snowshoe hares. In Colorado, lynx appear to be restricted to extremely isolated areas of the mountains in the central portion of the state.

Western prairie fringed orchid, whooping crane, piping plover, least tern and Pallid Sturgeon: These species and their critical habitats are located downstream from the Kremmling Field Office and are affected by water depletions.

Greater sage-grouse: Sage-grouse prefer relatively open sagebrush flats or rolling sagebrush hills. None of the parcels brought forward for lease in the Preferred Alternative (see Appendix C) contain preliminary priority habitat (PPH) for Greater sage-grouse. However, all of the parcels are identified as historical habitat and portions of parcel 6824 is identified as occupied habitat, nesting, and brood rearing habitat for sage-grouse. Most of parcels 6801 and 6795 are forested, thus would not provide suitable habitat for this species.

North American Wolverine: The distribution of wolverine in the KFO, as well as Colorado, is not well known. Wolverines are animals of boreal forests and tundra and have a preference towards marshy areas such as lowland spruce forests that support extensive wetlands. None of these habitats occur in the parcels proposed for lease.

Bald Eagle: Parcel 6824 contains habitat for bald eagle along the shores of Lake John. During the late fall and winter months, bald eagles make regular foraging use of open upland communities along major rivers and lakes.

American peregrine falcon: Parcel 6824 is in close proximity (within 0.5 miles) of habitat for peregrine falcon. At least one active nest is located in the cliffs just west of the proposed parcel. Peregrine falcons inhabit open spaces usually associated with high cliffs and bluffs overlooking rivers. Peregrines have an extensive range worldwide and are considered “locally common” in Colorado.

American white pelican: Parcels 6825 and 6824 contain or are in close proximity to habitat for the American White Pelican along the shores of several small lakes and Lake John. Pelicans breed on islands in large bodies of water and forage up to 30 miles from breeding sites. American white pelicans are widely scattered across western North America. In Colorado, pelicans are an abundant summer resident on the eastern plains and considered rare in the western valleys and mountain parks.

Northern goshawk: The KFO has a handful of recent records of goshawk nesting in North Park, the nearest being approximately 8 miles from the lease parcels in Jackson County. Based on BLM's experience, goshawks nest at low densities in Douglas-fir and aspen stands. Goshawks establish breeding territories as early as March and begin nesting by the end of April. Nestlings are normally fledged and independent of the nest by mid-August.

Brewer's sparrow: Brewer's sparrows are common and widely distributed in virtually all big sagebrush and mixed brush communities throughout the planning area. These birds are typically one of the most common members of these avian communities and breeding densities generally range between 10-40 pairs per 100 acres. Although most abundant in extensive stands of sagebrush, the birds appear regularly in small (one to two acre) sagebrush parks scattered among area woodlands and there is a strong possibility that they may be found nesting in parcels 6825, 6824, 6802, and portions of 6801 and 6795. Typical of most migratory passerines in this area, nesting activities normally take place between mid-May and mid-July.

White-tailed prairie dog: Within the KFO, the white-tailed prairie dog occurs in the shrublands of North Park. Reproduction occurs in late February with young born in late April to early May with the juveniles emerging above ground around the beginning of June. Portions of parcel 6801, 6824, and 6825 are identified as overall habitat for white-tailed prairie dogs. No active prairie dog towns are known to occur in these areas.

Townsend's big-eared bat: The distribution of bats in the KFO is not well understood. These bats typically use caves, mines, bridges, and unoccupied buildings for night, nursery, and hibernation roosts, but in western Colorado, single or small groups of bats use rock crevices and tree cavities. Although rock outcrops and mature conifers suitable as temporary daytime roosts for small numbers of bats are available in the Larimer parcels, there are no underground mines or known caves. In addition, unoccupied buildings are extremely limited in the proposed areas of oil and gas development. Birthing and rearing of young for these bats occur in June, and young are weaned and flying by the end of July.

Northern leopard frog: The Northern leopard frog inhabits wet meadows, the banks and shallows of marshes, ponds, lakes, reservoirs, streams, and irrigation ditches. The proposed parcels do not contain any known leopard frog populations. The proposed parcels may potentially contain habitat for this species along the riparian community associated with Boettcher lakes, Lake John, Lone Pine Creek and Dry Run Creek as well as small ponds within parcel 6801.

#### Environmental Consequences of Leasing and Development - Direct and Indirect Impacts:

North Park phacelia: Surface disturbance operations in leased areas can negatively impact special status plant habitat by generating fugitive dust, removing and/or disturbing pollinator habitat, and contributing to the spread of noxious weeds. However, it is not the BLM's intention to permit surface disturbance in any areas of potential or occupied habitat for either federally listed plants or BLM special status plants (CO-NSO-8). If development is proposed in areas where surveys locate new populations of special status plant species, a thorough environmental analysis will be completed prior to any surface disturbing activities to determine potential impacts associated



with the project. If federally listed plant species are found within the species' life history buffer of the project area a biological assessment would be submitted to the U.S. Fish and Wildlife Service. If BLM sensitive species are found near the project area impacts will be mitigated by either relocating the action or by applying conditions of approval.

Canada lynx and North American Wolverine: It is not likely that either Canada Lynx or wolverine inhabit the proposed leases. It is possible, however that these species may migrate through these parcels. If development occurs, impacts could include displacement into less suitable habitat. These impacts would be relatively minor to the species but long-term over the life of the development. If development occurs a consultation with the U.S. Fish and Wildlife Service may be required.

Northern goshawk and American peregrine falcon: Although there are no known nests within the proposed lease parcels, mixed forest communities in parcel 6801 and cliff habitat near parcel 6824 may provide suitable nesting habitat for these species. At least one active peregrine nest is located within 0.5 miles parcel 6824. No ponderosa forests are identified on any of the parcels. Raptor nest surveys are required prior to project implementation in those areas potentially influenced by proposed development activities. Information on functional nest sites found in the course of surveys are used as the basis for developing siting alternatives or applying timing limitations that reduce the risk of nest activity disruptions that could result in reproductive failure or compromising the long-term utility of nest habitat. The combination of COAs, TLs, and siting criteria that minimize or avoid adverse modification of nest habitat have been effective in preventing reproductive failures and maintaining the integrity of the nest substrate or woodland stands for subsequent nest functions.

Northern leopard frog and American white pelican: Considering management emphasis on riparian and sedimentation control (see Riparian section), it is unlikely that lease development would have any substantive consequence on the condition or function of features associated with aquatic habitats potentially occupied by the Northern leopard frog and American white pelican. Implementation of State and federally imposed design measures to control erosion and spills would limit the risk of contaminants migrating off-site and degrading water quality. However, it is likely that populations of amphibians in this system would also be subject to depletion-related effects, to which the development of proposed lease parcels would incrementally contribute. The combination of COAs, TLs, and siting criteria that minimize or avoid adverse modification of nest habitat and limit disturbance to nesting birds have been effective in preventing reproductive failures and maintaining the integrity of the nest substrate for subsequent nest functions.

Western prairie fringed orchid, whooping crane, piping plover, least tern and Pallid Sturgeon: Depending on the water sources and amount of water used to develop the leases, there could be depletions to the North Platte River Basin. The USFWS has determined that any water depletion in the Platte River basin may affect federally listed species and associated designated critical habitat. At the time of lease development, the BLM may need to initiate formal consultation pursuant to section 7 of the Endangered Species Act and require mitigation measures under the Platte River Recovery Implementation Program to offset these depletions.

Greater sage-grouse: Recent research offers strong indications that traditional forms and application of sage-grouse protection measures, formerly endorsed by State and federal wildlife managers, are ineffective in maintaining local sage-grouse populations in the face of even modest levels of fluid mineral development (e.g., Holloran 2005, Doherty et al. 2008, Walker et al. 2007). These data suggest that reduced lek attendance, avoidance and displacement from areas of energy development, lower survival of nesting hens, and reduced nest success are attributable to oil and gas development at well densities that exceed one well per section.

The proposed lease parcels encompass historical sage-grouse habitat. Parcels 6825, 6824, 6802 and portions of 6801 and 6795 contain sagebrush habitat and could support sage-grouse. The nearest active lek to the parcels is 2.0 to 3.5 miles away. If development is proposed in these areas, a thorough environmental analysis would be completed prior to any surface disturbing activities to determine potential impacts associated with the project. If Greater sage-grouse are found near the project area, impacts would be mitigated by either relocating the action or by applying conditions of approval which might include lengthening the timing limitations.

Bald Eagle: No nests have been recorded in or near the proposed leases. Bald eagle winter foraging is dispersed and opportunistic across the entire KFO area, and is concentrated along waterways, including Lake John. Surface disturbing activities that have potential to disrupt important bald eagle seasonal use activities are subject to NSO and TL stipulations. These stipulations have been successful in protecting ongoing nest efforts and maintaining the long-term utility of roost and nest sites in the KFO.

Brewer's sparrow: Inglefinger and Anderson (2004) documented 40-60 percent declines in Brewer's sparrow abundance within 100 meters of well access roads in Wyoming, and it is likely that this effect operates similarly in the KFO. Indirect habitat loss attributable to this behavioral response adds substantially to the effects of habitat lost to long term facility occupation and shrubland modification that attends shrubland clearing (temporary workspace, reclaimed areas, pipeline installation). Considering that full field development may assume 5-10 percent of the land base, the collective impact of these avoidance responses on breeding populations would be dependent on facility siting criteria and the distribution of development activity through time. Efforts are made at the APD stage to locate facilities on habitat patch interfaces and avoid bisects of cohesive stands of sagebrush. Assuming these birds are capable of reoccupying these corridors to some degree once activity subsides to production and maintenance levels, prompt and effective reclamation, encouraging the use of BMPs that reduce vehicle traffic, restricting public use of well access roads, and promoting clustered development would help reduce the duration and extent of nest habitat disuse. Many leaseholders, in cooperation with the BLM and Colorado Parks and Wildlife (CPW), are actively pursuing and implementing these technologies. Although lease parcel development would contribute incrementally to reduced abundance of Brewer's sparrow in the KFO, it is expected that losses at any given time during the life of a field would not compromise the viability of Brewer's sparrow populations nor alter the distribution of the species at any landscape level.

White-tailed prairie dog: White-tailed prairie dog involvement with the proposed lease parcels is minor and is confined to small portions of parcels 6801, 6824, and 6825. Site specific mitigation measures developed at the APD stage including daily and seasonal activity restrictions and

facility siting criteria would minimize or avoid adverse impacts to prairie dogs, particularly during the reproductive period.

Townsend's big-eared bat: It is unlikely that the proposed lease parcels offer habitat suitable for hibernation or rearing of young for the Townsend's big-eared bat. Perhaps widely distributed singly or in small groups during the summer months, roosting bats may be subject to localized disturbance from development activity. Considering siting criteria that avoids mature woodland involvement where possible, relatively minor but long-term reductions in mature woodland stands as sources of roost substrate is expected.

#### Environmental Consequences of Leasing and Development - Cumulative Impacts:

While nearby development can be avoided through NSO stipulations and reduce direct or indirect effects, the increase in disturbance could increase the spread and abundance of noxious weeds which is a cumulative impact on special status plant species. Additionally, landscape fragmentation could cumulatively impact pollinator habitat and the persistence of special status plant species if the fragmentation affects their ability to expand their range.

The USFWS has determined that any water depletion in the Platte River basin may affect Western prairie fringed orchid, whooping crane, piping plover, least tern and Pallid Sturgeon and their associated designated critical habitat. At the time of lease development, the BLM may need to initiate formal consultation pursuant to section 7 of the Endangered Species Act and require mitigation measures under the Platte River Recovery Implementation Program to offset these depletions.

Although the lease sale itself would not contribute cumulatively, the potential for future disturbance may influence special status animal species, depending on location and intensity of disturbance/development. Impacts to special status species would be more accurately analyzed on site-specific basis (APD-level environmental analysis) where appropriate mitigation and possible consultation with FWS would be addressed or required.

In general, development of these lease parcels would involve, to varying degrees, habitat loss, avoidance of habitat, and species-specific behavioral influences. Currently, there is very little energy-related development near the proposed parcels. Development within these parcels, should it occur, it is not expected to contribute substantially to existing disturbances in the area, nor is it expected to have any measureable influence on special status species or important habitats. Energy-related development is more intense and concentrated to the east (approximately 14 miles). It is suspected that cumulative effects would be more evident or pronounced where past or current development levels are greater, however they would not be expected to elevate to levels that would compromise the viability of any special status species or the utility of broader landscapes as habitat for those species.

Potential Future Mitigation: Reducing the duration or severity of impacts to special status plant and animal species is presented integral with the discussions above. Depending on the species, TLs, and NSOs have been applied to protect special status species and their habitat. In addition, all parcels are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plants or animals. Additional site specific

mitigation measures and COAs will be implemented at the APD stage and may include measures such as: 1) lease development in the vicinity of special status plant habitat will require a botanical inventory that meets the standards of the KFO plant survey protocol; 2) the timing required for conducting surveys may require deferring activities for longer than 60 days; 3) surface disturbance will not be allowed within mapped locations of special status plant species plants.

### 3.4.2.5 Upland Vegetation

Affected Environment: With the exception of the hay meadows, many of which were formerly occupied by sagebrush, the vegetation within these parcels is almost entirely composed of a shrub-bunchgrass type dominated by one or more species of sagebrush (*Artemisia* sp.) Other important shrubby species include greasewood (*Sarcobatus vermiclatus*), which is partly or completely dominant on some saline or alkali soils; rabbit brush (*Chrysothamnus* sp.) which is co-dominant on much of the area; willows (*Salix* sp.), which border running streams; and bitter brush (*Pushia tridentata*), snowberry (*Symphoricarpos* sp.) and gooseberry (*Ribes* sp.). The herbaceous vegetation of the study area consists primarily of perennial bunch grasses and low growing perennial forbs. Very few annuals are present.

The range sites potentially affected by the Proposed Action are shown in table below. The exact impacts to vegetation cannot be determined until site specific proposals have been submitted to KFO for analysis.

Parcel #	Range Site #	Range Site Name
6801, 6824	270	Valley Bench
6824	231	Dry Mt. Loam
6802, 6824, 6825	229	Rocky Loam
6824, 6825	235	Dry Exposure
6825	261	Salt Flats
6801,6824, 6825	228	Mountain Loam
6795, 6824	244	Mountain Swale
6795,6801	999	Forest
6801	237	Stony Loam
6824, 6825	RO	Rock Outcrop
6802	RK	Rock Land
6795	BA	Bad Land

In general, desired plant communities are managed in an ecological status of high-seral or healthy mid-seral for all rangeland plant communities within the KFO. Parcels in the lease area are currently meeting land health standards and would be classified at mid to late-seral. Vegetation conditions would be further evaluated during the onsite inspections for individual oil and gas activities if they are proposed.

Environmental Consequences of Leasing and Development of the Preferred Alternative - Direct and Indirect Effects: Specific impacts associated with vegetation cannot be predicted at the leasing stage, however, management direction in the Kremmling Field Office ROD/RMP allows for the site-specific development of COAs at the APD stage. Generally oil and gas development involves complete removal of vegetation and at times re-contouring of the landscape to allow resources to be retrieved. Vegetation is removed in an amount commensurate with the level of oil and gas development. COAs, including reclamation/restoration procedures, are developed at the approval stage and are followed throughout the life of the development. These COAs generally include plans for interim reclamation, re-seeding, re-contouring, and soil stabilization on the site. With appropriate COAs all developed land ultimately will be reclaimed and restored, albeit in some instances up to 30 years after initial disturbance. The type of ground-disturbing activity associated with oil and gas development does result in increased susceptibility to adverse impacts such as weed infestations and erosion.

Environmental Consequences of Leasing and Development - Cumulative Impacts: Future oil and gas development throughout the proposed lease sale parcels would disturb soils and vegetation beyond the past and present disturbances. Most vegetation loss would be for a relatively short timeframe because successful reclamation would return desirable vegetation and ecological function to disturbed sites. Where plant communities are dominated by invasive annuals or noxious weeds, successful reclamation of those disturbances would likely improve the condition of the plant community.

Potential Future Mitigation: Proposed mitigation measures, including reclamation practices, are developed upon environmental analysis of a site specific APD. Some examples of mitigation that may be applied are re-seeding areas of disturbance, treating noxious and or invasive species, and implementing erosion control where needed.

### 3.4.2.6 Wetlands and Riparian Zones

Affected Environment: Aerial photographs and the National Wetland Inventory (NWI) were used to identify possible wetland areas within the proposed leases. The National Wetland Inventory maps are summarized for each of the parcels:

Parcel	NWI wetland code	Wetland type	Acreage
6795	PABF	Freshwater Pond	0.5 acres
6801	PSSA, PSSB	Freshwater forested/shrub wetland	30 acres
	PABF	Freshwater pond	
	PEMA, PEMB	Freshwater emergent wetland	
6824	PEMB	Freshwater emergent wetland	5 acres
	PABFh	Pond (constructed)	

Parcel	NWI wetland code	Wetland type	Acreage
6825	PEMB	Freshwater emergent wetland	45 acres
	L2ABF	Freshwater lake	
	PABF	Freshwater pond	

In addition to the mapped wetlands, there appears to be riparian zones along Lone Pine and Dry Creeks (lease 6801) and an unnamed drainage in lease 6824.

Environmental Consequences of Leasing and Development - Direct and Indirect Impacts: Lease development generally avoids wetland and riparian areas, resulting in few direct impacts. Stipulation CSU CO-28 would be applied to all wetland and riparian areas within the leases, moving roads, pads, and other surface disturbances to outside of the wetland vegetation zone. Indirect impacts to riparian areas could occur from increased sediment loads travelling to and being deposited within a wetland, increased dust deposition on wetland vegetation, or increased animal use within a wetland due to displacement from a developed area. At the APD stage, additional conditions of approval would be applied to access roads and development plans to further reduce the potential impacts to wetland areas. Depending on the location and amount of development, there could still be some unavoidable impacts to riparian or wetland areas, especially in a smaller parcel with more wetland acreage such as 6825.

Environmental Consequences of Leasing and Development - Cumulative Impacts: It is assumed that currently the wetland and riparian zones are only impacted by animal use, either by wildlife and/or livestock. Animals can trample and remove vegetation. Additional direct impacts to wetlands within the lease from energy development would not be anticipated. Surface disturbances from well pad construction and access roads could result in increased sediment loads and fugitive dust being deposited on the vegetation. Depending on the actual access routes, if any, there could be the potential of spills reaching wetlands within or adjacent to the leases. Some increased animal use could occur if they are displaced by the energy development in the uplands. Reclaimed upland surface disturbances, until trees reestablish, could provide additional forage for animals, helping reduce pressure on the wetlands.

Potential Future Mitigation: Mitigation would be developed when specific lease development proposals are received. Mitigation may include relocating proposed development up to 2000 feet to increase the undisturbed buffer protecting wetlands or requiring closed loop systems to insure the wetland's water quality is protected.

### **3.4.2.7 Aquatic Wildlife**

Affected Environment: Lease parcel 6801 encompasses two perennial streams, Lone Pine Creek and Dry Run Creek, which are capable of supporting coldwater fisheries and other aquatic life. Riparian habitat in parcels 6825 and 6824 may support populations of Northern leopard frogs, also a BLM-sensitive species, although none have been documented. This species is discussed in the Special Status Species section above. The remaining systems (See Surface & Ground Water Quality Section), although perennial and/or intermittent, are relatively small and likely do not support aquatic wildlife.

Environmental Consequences of Leasing and Development - Direct and Indirect Impacts:

See discussions in the Special Status Species and Wetland and Riparian Zones sections. Emphasis on riparian and channel avoidance and sedimentation control provide a sufficient range of measures and objectives that, applied to lease development, effectively avoids substantive consequence on the condition or function of channel features associated with aquatic habitats. Implementation of State and federally-imposed design measures to control erosion and spills also work to limit the risk of contaminants migrating off-site and degrading water quality in these systems. There are no impacts associated with the leasing of these parcels. Impacts associated with the development of the lease parcels would be determined and analyzed through an environmental assessment at the APD stage. With the application of COAs and BMPs, impacts to aquatic habitats can be reduced or avoided.

Environmental Consequences of Leasing and Development - Cumulative Impacts:

Cumulative effects would be similar to those discussed in the Special Status Species (specific to endangered river fish and Northern Leopard Frog) and Wetland and Riparian Zones sections.

Potential Future Mitigation: If and when a lease is proposed for development, best management practices and conditions of approval would be required to protect streams and wetland habitat that support aquatic wildlife. Mitigation may include relocating proposed development or requiring closed loop systems.

### **3.4.2.8 Terrestrial Wildlife**

Affected Environment: Lease parcel 6825 provides overall habitat for black bear, bighorn sheep and elk. This parcel is also mapped as summer range and a migration corridor for mule deer. Parcels 6824, 6801 and 6802 provide overall habitat for cougar, black bear bighorn sheep and pronghorn. Parcel 6824 is also mapped as a concentration area for mule deer, a production (calving) area for elk, and moose priority habitat (section 19). Parcel 6801 is mapped as a bighorn migration corridor, mule deer summer range, moose summer range, priority habitat, and concentration area, and an elk production area. Parcel 6802 is also mapped as mule deer summer range and concentration area, and elk production area. Parcel 6795 provides overall habitat cougar, black bear and pronghorn. This parcel is also mapped as mule deer summer range, moose summer range and priority habitat, and an elk production area.

Parcels 6824, 6801, 6802, and 6795 are located in big game winter range (deer, elk, and/or moose). Parcel 6824, 6802 and 6795 are also elk severe winter range and 6802 and 6795 are elk winter concentration areas. These ranges fulfill their most important function during the later winter and early spring months prior to widespread plant emergence. By definition, these ranges harbor the majority of the area's big game populations under the most severe winter weather conditions when big game energetic demands are highest and access to nutritional forage lowest.

Lease parcels 6824 and 6802 are within 0.5 miles of a raptor nest site. Raptor nest surveys are required prior to project implementation in those areas potentially influenced by proposed development activities. Information on functional nest sites found in the course of surveys are used as the basis for developing siting alternatives or applying timing limitations and/or COAs

that reduce the risk of nest activity disruptions that could result in reproductive failure or compromising the long-term utility of nest habitat.

Small mammals that are likely to inhabit the lease parcels, display broad ecological tolerance and are widely distributed throughout the region in suitable habitats. No narrowly distributed or highly specialized species or sub-specific populations are known to inhabit the KFO.

#### Environmental Consequences of Leasing and Development - Direct and Indirect Impacts:

Traditional timing limitations continue to be applied to important summer and winter (i.e., severe winter and critical winter) ranges by the State and BLM, although these measures were not designed or intended to deal effectively with new drilling and completion technologies (e.g., deep directional, multi-well pads) and the disposal of large quantities of produced fluids. Sawyer (2006) demonstrated strong avoidance response of natural gas development activity in Wyoming deer and the pronounced influence of residual activity associated with maintenance/production phases and subsequent recreational use of well access roads. Later, Sawyer (2009) acknowledged that avoidance response in deer could be substantially reduced (40-60 percent) in these fields by employing technologies that reduce the truck transport of produced fluids (i.e., fluid transport via pipeline). These studies provide compelling evidence that behavioral impacts (habitat disuse from avoidance, elevated energetic demands) associated with human and vehicular activity attributable to oil and gas development are the primary impact imposed on big game and are, in these circumstances, more expansive and deleterious than direct habitat loss associated with longer term infrastructure occupation and shorter term vegetation modifications. Industry is actively planning or implementing fluids gathering systems that would drastically reduce the frequency of vehicle activity on affected big game ranges.

Complementary actions that are being employed to further reduce direct or indirect impacts include pooled employee transport, on-site employee housing, adjusting lease requirements or offering year-round development incentives to promote clustered development, increasing the number of wells sequentially drilled at each location, and phased reclamation instituted soon after the pad is constructed. Site-specific conditions and opportunities are also reflected in COAs developed at the APD stage, including restricting public access on well access roads and pipeline rights-of-way and siting facilities and infrastructure in a manner that balances the interspersions of cover and forage compatible with the behavioral traits of deer and elk. Although not all proposed lease parcels may be developed in this manner, more advanced objectives and principles are likely to be universally promoted and applied where practical. With continued cooperation from industry and the State, and assuming the BLM will adapt lease and unit obligations to encourage clustered development patterns (reduced exposure to disturbance, increased efficiency of wildlife-oriented reclamation), the BLM believes impacts to big game abundance and distribution can be largely averted.

Oil and gas development's interference with and/or interruption of big game seasonal range movements have surfaced as a serious issue in some Wyoming natural gas fields. Because drilling operations at present tend to be clustered, increasingly sedentary (i.e., a rig may be at one location for up to two years while drilling multiple wells on pad versus a few months or less for a single well) and quiet, with a declining trend in well visitation and landscape footprint, BLM and



CPW biologists do not feel at this time that big game migration movements have potential to be impaired sufficiently to adopt timing limitations as a remedy.

The combination of NSO and TL lease stipulations, and/or COAs, and complementing siting criteria that attempts to minimize or avoid adverse modification of raptor nest habitat character have been effective in preventing reproductive failures and maintaining the integrity of the nest substrate or woodland stand for subsequent nest attempts. Raptor nest surveys are required prior to project implementation in those areas potentially influenced by proposed development activities. Information on functional nest sites found in the course of survey are used as the basis for developing siting alternatives or applying COAs that reduce the risk of nest activity disruptions that could result in reproductive failure or compromising the long-term utility of nest habitat. The most prevalent habitat-related risk attending fluid minerals development in the KFO is the clearing of woodlands, which alters stand conformation for decades. Recent BLM monitoring efforts indicate that woodland nesting species, primarily Cooper's hawk and long-eared owl, continue to nest in more heavily developed fields at densities generally comparable to those found in sparsely developed areas. A limited amount of data suggest that brood size may be reduced under circumstances of concentrated development activity, but it would seem unlikely that these effects would persist at levels that would impair the long term viability of local populations.

Lease development's influence on small mammal populations, at least in the short term, is likely primarily confined to on-site mortality and direct habitat loss attributable to facility occupation and vegetation clearing. Due to the relatively small areal extent of actual surface occupation and the large intervening matrix of undisturbed lands, it is unlikely that present infrastructure extent or patterns are eliciting widespread species-area effects or (for most species) imposing barriers (e.g., roads) that preclude occasional genetic interchange. COAs to redistribute large woody debris on reclaimed pipeline corridors is, among other purposes, intended to provide cover for more secure small mammal movements and moderate the width and contrast in foreign substrate that must be crossed. These assumptions are tempered by the possibility that certain species may rarely, if ever, cross barren roadbeds. The expanse of continuous habitat usually available on either side of a ridge (typical pattern of development) and its present ability to support robust populations of small mammals would likely mask declining population fitness for long periods of time.

#### Environmental Consequences of Leasing and Development - Cumulative Impacts:

Cumulative effects would be similar to those discussed in Special Status Plant and Animal Species section.

Potential Future Mitigation: Reducing the duration or severity of impacts to terrestrial species is presented integral with the discussions above. Timing limitations and no surface occupancy restrictions have been applied to protect terrestrial species and their habitat. Additional site specific mitigation measures and COAs will be implemented at the APD stage and may include measures such as relocating proposed development or deferring activities for longer than 60 days.

### **3.4.3 Heritage Resources and Human Environment**

#### **3.4.3.1 Cultural Resources**

Affected Environment: The June 2014 lease area of approximately 2566.94 acres, only 340 estimated acres have been inventoried at the Class III level. In parcel #6825 approximately 20 acres of BLM-administered land have been inventoried at the Class III level with no sites recorded. In parcel #6824 only 280 acres of BLM-administered land have been culturally inventoried with no site recorded. No cultural resource inventory has been conducted within parcel #6802. In lease parcel #6795 located around Pole Mountain of approximately 860 acres, a previous random line seismic inventory recorded and evaluated only four prehistoric sites (5JA1887 to 5GJA1890). Only site 5JA1889 is considered to be eligible to the National Register of Historic Places.

Environmental Consequences of Leasing and Development- Direct and Indirect Impacts: All known significant historic properties would be avoided (see Exhibit CO-39). Seismic exploration activities associated with oil and gas development could result in surface disturbance, and, therefore, in the identification of cultural sites. All oil and gas development would be subject to Class III Cultural Resource Inventories and site evaluation. This requirement would result in the identification of cultural sites, a determination of site significance, and mitigation measures (such as avoidance of cultural sites during development activities). However, surface disturbance associated with oil and gas development in areas of very high cultural-site density could result in the identification of sites that are unavoidable during mineral development. Sites that are unavoidable would be mitigated, resulting in the physical alteration or elimination of sites as they are mitigated through data recovery or other on-site means.

Environmental Consequences of Leasing and Development - Cumulative Effects: The June 2014 lease area contains areas of high to low potential for cultural resource sites. Past and present effects to cultural resources come from grazing or other actions with the loss of vegetation leading to water and wind erosion that has caused the loss of features and artifact displacement. The lack of undertakings has provided site protection while at the same time contributed to the lack of scientific information from site location, site type, and other important information. The Proposed Action would increase scientific knowledge with newly discovered cultural resource sites. At the same time mitigation measures would be needed to collect the scientific information and provide protective measures to significant historic properties. New surface disturbance resulting from fluid minerals resource development would have potential adverse impacts to cultural resources from ground disturbance, erosion, intrusions to landscape setting to TCPs, access leading to unauthorized collection or vandalism, and interference with traditional cultural uses and access. Fluid minerals exploration and development activities are subject to further cultural resource review at each stage of development through the NHPA Section 106 process or permitting stipulations.

Potential Future Mitigation: The proposed lease parcels 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. Before any future APD actions are

approved for exploration or drilling, Section 106 of the National Historic Preservation Act (NHPA) will be completed for these undertakings.

The BLM would not approve any ground disturbing activities that may affect any such properties or resources until it completes its obligation 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.

### **3.4.3.2 Hazardous or Solid Wastes**

Affected Environment: There are no known quantities of wastes, hazardous or solid, located on BLM-administered lands in the proposed lease sale parcels, and there would be no wastes generated as a result of leasing the Parcels under the Preferred Alternative or No Action alternative. A determination will be made as to whether solid or hazardous wastes have been previously used, stored, or disposed of at proposed oil and gas construction sites at the time individual APDs are submitted.

#### Environmental Consequences of Leasing and Development - Direct and Indirect Impacts:

The act of leasing the parcels for oil and gas development will not involve the use and management of petroleum products or hazardous substances. However, these activities will take place at the exploration and development stage. The magnitude and location of potential direct and indirect effects cannot be understood or analyzed until the site-specific APD stage of development.

The most pertinent of the Federal laws dealing with hazardous materials are as follows:

- The Oil Pollution Act (Public Law 101-380, August 18, 1990) prohibits discharge of pollutants into waters of the US, which by definition would include any tributary, including any dry wash that eventually connects with the Colorado River.
- The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (42 U.S.C. 9601–9673), provides for liability, risk assessment, compensation, emergency response, and cleanup (including the cleanup of inactive sites) for hazardous substances. The act requires federal agencies to report sites where hazardous wastes are or have been stored, treated, or disposed of, and requires responsible parties, including federal agencies, to clean up releases of hazardous substances.
- The Resource Conservation and Recovery Act (RCRA), as amended by the Federal Facility Compliance Act of 1992 (42 U.S.C. 6901–6992), authorizes the EPA to manage, by regulation, hazardous wastes on active disposal operations. The act waives sovereign immunity for federal agencies with respect to all federal, State, and local solid and hazardous waste laws and regulations. Federal agencies are subject to civil and administrative penalties for violations and to cost assessments for the administration of the enforcement.
- The Emergency Planning and Community Right-To-Know Act of 1986 (42 U.S.C. 11001–11050) requires the private sector to inventory chemicals and chemical products,

report those in excess of threshold planning quantities, inventory emergency response equipment, provide annual reports and support to local and State emergency response organizations, and maintain a liaison with the local and State emergency response organizations and the public.

The leased parcels would fall under environmental regulations that impact disposal practices and impose responsibility and liability for protection of human health and the environment from harmful waste management practices or discharges. The direct impact would be if a solid waste or hazardous material is discarded and contaminates land surface either by solid, semi-solid, liquid, or contained gaseous material. Hazardous, civil, and criminal penalties may be imposed if the waste is not managed in a safe manner, and according to EPA regulations.

Environmental Consequences of Leasing and Development - Cumulative Impacts: Historic and continued energy development in the area would not likely have an additive effect on the amount of solid or hazardous waste introduced in the environment if laws and regulations are followed and enforced.

Potential Future Mitigation: These laws, regulations, standard lease stipulations, and contingency plans and emergency response resources are expected to adequately mitigate any potential hazardous or solid waste issues associated with leasing and development.

### **3.4.3.3 Native American Religious Concerns**

Affected Environment: There is a potential that within any of the parcels there are sites and areas of cultural and religious concern to Native American tribes, including Traditional Cultural Properties (TCPs). These areas are associated with “cultural practices or beliefs of a living community that (a) are rooted in the community’s history, and (b) are important in maintain the continuing cultural identity of the community” (National Register Bulletin 38:1). TCPs are areas that are eligible for inclusion in the National Register of Historic Places. The recognition of TCPs is often difficult for non-Tribal members because the term “Traditional” in this context refers to those beliefs, customs, and practices of a living community of people that have been passed down through the generations, usually orally or through practice. In order to determine if there are sites and areas of cultural and religious concern to Native American tribes, including TCPs, the BLM consulted with officials from five Native American tribes with cultural and historic connections to the Kremmling Field Office area. These tribes were consulted on September 10, 2013. All affiliated tribes the Northern Ute Tribe, Ute Mountain Ute Tribe, Southern Ute Tribe, Eastern Shoshone, and Northern Arapaho have requested continued consultation and recognition of the area as important to those tribes.

Environmental Consequences of Leasing and Development- Direct and Indirect Effects: The act of leasing oil and gas parcels has potential to cause effects on sites of cultural and religious concern to Native American tribes, including TCPs. Though there are no direct or indirect impacts to these resources caused by ground disturbance, the BLM must take into account the potential affect to cultural landscapes from future entry to explore and develop the parcels.

Potential Future Mitigation: Tribal consultation did not identify sites and areas of cultural and religious concern to Native American tribes, including TCPs within the proposed parcels. There will be no effect to these resources from this action. All lands are subject to Exhibit CO-39 to protect resources of cultural and religious significance. Before any future APD actions are approved for exploration or drilling, additional tribal consultation will be conducted for these undertakings to comply with Section 106 of the National Historic Preservation Act (NHPA).

#### **3.4.3.4 Paleontological Resources**

Affected Environment: The BLM has implemented a Potential Fossil Yield Classification (PFYC) system for classifying paleontological resources on public lands. Under the PFYC system, geologic units are classified from Class 1 to Class 5 based on the relative abundance of vertebrate fossils or uncommon invertebrate or plant fossils and their sensitivity to adverse impacts. A higher classification number indicates a higher fossil yield potential and greater sensitivity to adverse impacts. The project area contains portions of geological formations known to produce high scientifically valuable fossils, resulting in PFYC 3 classification. The formations affected, their PFYC values, and their known fossil types within the KFO proposed lease areas, are as follows (BLM Colorado State Office PFYC chart):

(Parcel #6825)

Modern Alluvium – PFYC 2, Condition 3; with no known fossils.

Morrison, Burro Canyon Sandstone - PFYC 5, Condition 1; Areas are known to contain vertebrate fossils or noteworthy occurrences of invertebrate or plant fossils.

(Parcel #6824)

Glacial Drift of Pinedale and Bull Lake Glaciations – PFYC 3, Condition 2; Areas with exposures of geological units or settings that have high potential to contain vertebrate fossils or noteworthy occurrences of invertebrate or plant fossils.

(Parcel #6801 and #6824)

Granitic Rocks of 1400 m.y. Age Group – PFYC 1, Condition 3; Areas that are very unlikely to produce vertebrate fossils or noteworthy occurrences of invertebrate or plant fossils.

Mafic Rocks of 1700 m.y. Age Group – PFYC 1, Condition 3; Areas that are very unlikely to produce vertebrate fossils or noteworthy occurrences of invertebrate or plant fossils.

Morrison Burro Canyon Sandstone, Dakota – PFYC 5, Condition 1; Areas are known to contain vertebrate fossils or noteworthy occurrences of invertebrate or plant fossils.

(Parcel #6802)

Coalmont Formation – PFYC 3, Condition 2; Fish, fresh water fish, fishbones and scales, beetles and other insects, plant remains, pollen and spores, leaf and seed pod imprints, seams of coal, but no petrified wood or fossil logs are known, along with Ammonites (marine mammals), baculites, nautilus, bivalves, clams, gastropods, mosasaurs (marine reptiles), scaphites (cephalopod), and oysters.

(Parcel #6795)

Coalmont Formation – PFYC 3, Condition 2; Fish, fresh water fish, fishbones and scales, beetles and other insects, plant remains, pollen and spores, leaf and seed pod imprints, seams of coal, but no petrified wood or fossil logs are known, along with Ammonites (marine mammals), baculites, nautilus, bivalves, clams, gastropods, mosasaurs (marine reptiles), scaphites (cephalopod), and oysters.

The PFYC 3 has geologic units containing a high occurrence of significant fossils. Vertebrate fossils or scientifically significant invertebrate or plant fossils are known to occur and have been documented, but may vary in occurrence and predictability.

The PFYC 5 has highly fossiliferous geologic units that consistently and predictably produce vertebrate fossils or scientifically significant invertebrate or plant fossils, and that are at risk of human-caused adverse impacts or natural degradation.

Environmental Consequences of Leasing and Development - Direct and Indirect Effects: The June 2014 lease sale parcels contain areas mapped as PFYC 3 and 4 classifications with formations that have a high potential to impact scientifically valuable fossil resources. Locations for proposed oil or gas well pads, pipelines, and associated infrastructure could directly adversely affect both surface and subsurface paleontological resources. The number of localities that could be impacted by various actions would directly correlate to the degree, nature, and quantity of surface-disturbing activities. Paleontological assessment and inventory is required at the time of development. Development of oil and gas resources could impact paleontological resources due to the surface disturbances associated with such development. Vertebrate or other scientifically significant fossils could be inadvertently damaged from disturbance if they were not identified and avoided or mitigated. Surface-disturbing activities could expose, dislodge, or damage paleontological resources and features that were not visible before surface disturbance. Increased access associated with new development would lead to increased access to paleontological sites.

Environmental Consequences of Leasing and Development - Cumulative Effects: Other impacts to Paleontological resources may result from surface impacts or exposure from recreational OHV use or the loss of vertebrate or invertebrate fossil material from collection. Other impacts may come from road maintenance of unimproved roads that may uncover previously unknown fossil resources. The lease parcels may contain important fossil resources.

Potential Future Mitigation: An inventory of fossil resources in paleontological areas having a Potential Fossil Yield Category ranking of 3 and 5 would be performed by an accredited paleontologist prior to the issuance of a permit to develop in these areas.

### **3.4.3.5 Social and Economic Conditions**

Affected Environment: Parcels nominated for leasing are offered for sale during an oral auction. The minimum acceptable bid for a parcel is \$2.00 per acre. Because the sale is conducted as an auction, the minimum bid is often increased, sometimes substantially, until bidding ceases. The

increased bid is called a bonus bid. The sum of the minimum bid and the bonus bid, if any, is collected the day of the sale. Additionally the first year's rental of \$1.50 an acre or fraction of an acre must be paid at the time of the sale. Annual rental is \$1.50 per acre or fraction of an acre for the first five years of the lease term, increasing to \$2.00 per acre or fraction of an acre for any subsequent year. Because parcels are auctioned, there can be no guarantee that each parcel will be sold, and an estimate cannot be made in advance of the sale of the revenue produced from selling the parcels.

Environmental Consequences of Leasing and Development - Direct and Indirect Impacts: The leasing process provides no direct socio-economic benefit or detriment, except for the collection of bids, bonus bids, and rentals. The minimum income if all recommended parcels are sold at the May sale would be approximately \$5,133.88. Income from the sale goes to the federal and Colorado treasuries. The federal and Colorado treasuries would receive revenue if leases unsold during the November sale are later purchased non-competitively. Economic and social impacts would result from development of leases, in the form of temporary or permanent employment, rental or purchase of equipment, and royalties paid to the federal and Colorado treasuries, and other expenditures related to development. At the leasing stage, an estimate of economic impacts is not possible. Similarly, it is not possible to predict social impacts because development is not assured. The existing businesses (outfitters) the area might decline if it was to be developed since they would not be able to obtain the recreational experience that is associated with horseback rides and afforded by being able to travel across a landscape not impacted by energy development.

Environmental Consequences of Leasing and Development - Cumulative Impacts: This lease sale, when combined with the past, present and reasonably foreseeable actions, contributes slightly to the state and federal treasuries, and could contribute to continuation of an industry that provides substantial income and jobs to the community.

Potential Future Mitigation: None

### **3.4.3.6 Visual Resources**

Affected Environment: Visual resource inventory (VRI) is broken into four classes. Since the 1984 Resource Management Plan (RMP) did not designate Visual Resource Management (VRM) areas in the Kremmling Field Office, BLM manages visual resources to protect the VRI by applying management class objectives to the inventory. The proposed parcels for this lease sale lie within VRI Class II in Jackson County. No VRI occurred on parcel 6802, since it is State Land. The inventory classes are informational in nature and provide the basis for considering visual values in the NEPA process. They do not establish management direction and should not be used as a basis for constraining or limiting surface disturbing activities. The lands in Jackson County are rural but due to the location next to the lakes, many locals and visitors recreate in these areas. Since the area is mostly used for boating, fishing, undeveloped camping and hunting, the visitor is not expecting development.

Environmental Consequences of Leasing and Development - Direct and Indirect Effects: The anticipated impacts to visual values held by the various publics in the area as a result of projected

landscape changes during oil and gas development would be noticeable due to new access roads and oil and gas buildings and facilities. The value of wide open views and serenity of the area for boaters, fishermen, campers and hunters would be lessened depending on the amount of development.

Environmental Consequences of Leasing and Development - Cumulative Effects: Continued oil and gas development activities, combined with other surface disturbing activities, would cumulatively impact the visual values held by the public until the Resource Management Plan is completed and Visual Resource Management can be applied to these areas. For example, if the area was classified as VRM Class II, the area is particularly vulnerable to cumulative visual changes on the landscape as the objective of VRM Class II is to retain the existing character of the landscape.

Potential Future Mitigation: For VRI Class II, all facilities, including meter buildings, could be painted a color determined by the Authorized Officer at the time of development to blend with the vegetative and/or landform setting and minimize contrast as much as possible. Additional COAs, such as landform contouring, vegetation screening, ridgeline and slope avoidance, may be added on a case by case basis for each APD. Each COA would be developed based on site specific analysis of the APD to reduce contrasts with the form, line, color, and texture of the surrounding landscape to ensure that the objectives of the respective VRI Class may be retained.

### **3.4.4 Resource Uses**

#### **3.4.4.1 Livestock Operations**

Affected Environment: The nominated parcels occur within 8 different livestock grazing allotments administered by the BLM KRFO (See table below).

<b>Parcel</b>	<b>Allotment</b>	<b>Acres</b>	<b>AUM's</b>
6801	#07073 -Playa	2,460	798
6825	#07017 -Windy Gap	3,395	325
6824	#07021 - Brands	1,561	478
6824	#07133- Sheep Mountain	2,057	200
6824	#07134 -Palisade	853	106
6795	#07154 -Pole Mountain	800	350
6795	#07183 -Wamsley D 6 81 2	625	113
6795	#07184 -Wamsley D 6 81 3	1,110	88
6802	No Allotment		

Permitted livestock grazing use occurs during the spring, summer, and fall. Throughout these allotments there are long term trend monitoring sites and various range improvement projects including fences and water developments, which could potentially be impacted by oil and gas development activities.



Environmental Consequences of Leasing and Development - Direct and Indirect Effects: The actual amount of direct and indirect effects to livestock grazing in any given allotment cannot be predicted until the site-specific APD stage of development. General direct effects on livestock grazing would be forage loss associated with vegetation removal. The amount of forage loss would vary based on the productivity of the affected range site prior to disturbance, the distance of that site from livestock water sources and the topography of the site. Livestock make the most use of areas less than one mile from water sources and areas with gentle topography, in areas where development occurs more than a mile from water sources or on steeper slopes, forage losses resulting from development would have less impact on livestock grazing. Interim reclamation of portions of each area disturbed for oil and gas development would reduce forage losses as vegetation re-establishes. After successful final reclamation, herbaceous forage production would likely be slightly higher than pre-disturbance levels until woody vegetation reestablishes.

Indirectly there would be additional forage losses associated with dust deposition on vegetation adjacent to roads or the pad/facility during its development. Dust coated vegetation tends to be less palatable to grazing animals including livestock. Additionally, during periods of intensive development livestock may tend to avoid the area due to the increased activity and noise levels.

Rangeland improvements such as fences, and watering facilities could be impacted by road and pad construction though most such situations would be mitigated by moving the road or pad or reconstructing the range improvement as part of the development action. Placement of facilities near rangeland improvement projects could compromise their usefulness, particularly during the development stage. Where pads are placed near water sources, there is an increased potential for stock to use the pad areas for resting, and rubbing on facilities. This increases the potential for livestock to be exposed to various drilling related hazards.

Environmental Consequences of Leasing and Development Cumulative Effects: Overall, leasing the above parcels would result in continued oil and gas development activities similar to what has occurred throughout the area over the last 30-plus years. Where development occurs there would be temporary, short-term forage losses potentially resulting in adjustments to permitted grazing use. A slight positive benefit would be likely where successful reclamation increases the production of forage, especially on sites where forage production had previously been below site potential. There would likely be no significant direct or indirect cumulative impact on livestock grazing operations in these allotments. However, cumulative impacts from past, present, and possible future oil and gas activities could have a long-term effect on the native range's carrying capacity, thus influencing the authorized animal unit month, or AUMs. This possible affect would be determined during the grazing permit renewal process which includes an evaluation of forage capacity available for livestock. It is foreseeable that the grazing permit holder could lose a portion of permitted active AUMs due to a loss of forage associated with oil and gas development within the authorized BLM grazing allotment(s).

Potential Future Mitigation: Site specific analysis may lead to application of COAs at the APD stage that may include avoiding long-term trend monitoring sites by at least 300 feet and, repairing, or replacing any rangeland improvements impacted by oil and gas development activities.

### **3.4.4.2 Realty Authorizations and Land Tenure**

Affected Environment: The BLM issues right-of-way (ROW) grants to authorize uses across BLM-administered public lands, in accordance with regulations, to help ensure that public lands are managed to benefit the public and to avoid undue or unnecessary degradation. A ROW is required for all uses outside the boundaries of the oil and gas lease (off-lease) for the purpose of on-lease development, regardless of who owns or controls the development. There is one ROW on Parcel 6825 granted to Mountain Parks Electric for a powerline.

Environmental Consequences of Leasing and Development - Direct and Indirect Impacts: The level and location of direct, indirect, or cumulative effects cannot be predicted until the site-specific APD stage of development. Existing ROWs can be impacted by development, including roads, pipelines, well pads, and utilities. To avoid impacts to existing uses, the applicant would coordinate with the existing ROW holders at the site-specific APD stage of development. As a result of the environmental analysis of the proposed site-specific APDs, locations, methods, and materials used for development of facilities may be adjusted to mitigate effects.

Environmental Consequences of Leasing and Development - Cumulative Impacts: No cumulative effects have been identified.

Potential Future Mitigation: None

### **3.4.4.3 Recreation**

Affected Environment: The lease parcels are located within the Kremmling Extensive Recreation Management Area (ERMA). The objective of Recreation Resource Management is to ensure the continued availability of recreational opportunities which the public seeks and which are not readily available from other sources, to reduce the impacts of recreational use on fragile land, unique resource values, and to provide for visitor safety, and resource interpretation. The ERMA is managed to receive limited management for dispersed recreation use, such as hunting, hiking and sightseeing while maintaining existing recreational facilities. The proposed project area provides opportunities for camping, hiking, hunting, driving for pleasure and wildlife watching. Other portions of the project area provide opportunities for a more active type of recreation and are popular for off-highway vehicle (OHV) use. The proposed project area has the greatest visitation during Big-Game Hunting seasons. There are two authorized Special Recreation Permits (SRP) within the project area that provide Big Game Guided Hunting and Outfitter Services. One permittee is authorized for a hunting camp between August and December within Parcel 6824. There are no developed recreation sites or facilities in the proposed project area on BLM-administered lands.

Environmental Consequences of Leasing and Development - Direct and Indirect Impacts: Seasonal recreation opportunities vary depending on the activity. Typically activities such as camping, hiking, driving for pleasure or sightseeing occur during the spring to fall seasons. Activities such as hunting occur during the late summer to winter seasons. As such, during oil and gas field development when there is typically a higher presence of vehicular traffic and other

activity, the public would likely be displaced from the actual sites of oil and gas infrastructure development. The impact of displacement would be dependent on the level of development and how often the developed site is traveled to and from and level of activity at the site. Big game may also be displaced that would have an impact on hunting and SRP holders who provide services to the public. However, hunters generally continue to hunt in close proximity of the actual sites of development once completed as long as big game is present. The presence of oil and gas infrastructure does not necessarily deter recreational hunting if the quality and abundance of game is sufficient. The amount and severity of recreational displacement is often site specific, based on the development level proposed and is addressed in subsequent site specific analyses. The Terrestrial Wildlife section provides a detailed discussion of big game wildlife activity.

Environmental Consequences of Leasing and Development - Cumulative Impacts:

Oil and gas field development in the proposed project area, in conjunction with ongoing energy development in the North Park region, other forms of energy development and other surface disturbing activities, could cumulatively have a negative impact on the recreation opportunities by changing altering the areas setting and ability to have non-developed areas for dispersed recreation. Development within the proposed project area would also have a cumulative impact to SRP holders and the recreational services they provide to the public through impacts to areas they are authorized in and the displacement of big game species. There would also be a cumulative impact to other recreational opportunities as they may be displaced to other areas that are not developed and the increased potential for conflict with other non-recreational uses and users.

Potential Future Mitigation: The mitigation measures specific to big game that are discussed in the Terrestrial Wildlife section are applicable to recreation.

***REFERENCES CITED:***

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## CHAPTER 4- COORDINATION AND CONSULTATION

**PERSONS/AGENCIES CONSULTED:** Scoping letters were sent to land surface owners whose land overlies federal minerals proposed for leasing, Jackson County, Colorado Parks and Wildlife and five Native American Tribes (Northern Ute, Ute Mountain Ute, Southern Ute, Eastern Shoshone), requesting comments on the nominated parcels. Comments were only received from Colorado Parks and Wildlife. See Section 1.4.1 for additional discussion on public scoping.

### LIST OF PREPARERS AND PARTICIPANTS:

#### INTERDISCIPLINARY REVIEW

Name	Title	Resource
Zach Hughes	Natural Resource Specialist	Invasive/Non-native Species,
Paula Belcher	Hydrologist	Air Quality, Floodplains, Surface & Ground Water Hydrology, Soils, Water Quality (Surface), Wetlands & Riparian Zones, Prime and Unique Farmlands
Susan Cassel	Associate Field Manager	Socioeconomics, Environmental Justice
Kelly Hodgson-Elliott	Natural Resource Specialist	Hazardous or Solid Wastes, Fluid & Solid Minerals
Megan McGuire	Wildlife Biologist	Migratory Birds, Special Status Plant and Animal Species, Wildlife (Aquatic & Terrestrial), Areas of Critical Environmental Concern.
Neilie Goodwin	Rangeland Management Specialist	Upland Vegetation, Livestock Operations
Bill Wyatt	Archeologist	Cultural Resources, Native American Religious Concerns, Paleontology
Annie Sperandio	Realty Specialist	Realty Authorizations, Land Tenure

Name	Title	Resource
Hannah Schechter	Recreation Planner	Visual Resources, Wild and Scenic Rivers
John Monkouski	Recreation Planner	Lands with Wilderness Characteristics, Wilderness Study Areas, Access and Transportation, Recreation
Kenneth Belcher	Forester	Forested Areas

**ATTACHMENTS:**

**Attachment A – All Nominated Parcels/Proposed Action with Stipulations for Lease**

**Attachment B – Recommended Parcel Deferrals**

**Attachment C – Preferred Alternative Parcels with Stipulations for Lease**

**Attachment D – Stipulation Exhibits**

**Attachment E – Response to Public Comments**

**Attachment F – Maps**

**ATTACHMENT A:**

***All Nominated Parcels/Proposed Action with Stipulations for Lease  
June 2014 - Colorado Competitive Oil & Gas Lease Sale***

THE FOLLOWING **ACQUIRED LANDS** ARE SUBJECT TO FILINGS IN THE MANNER SPECIFIED IN THE APPLICABLE PORTIONS OF THE REGULATIONS IN 43 CFR, SUBPART 3120.

**PARCEL ID: 6835**

T.0070N., R.0790W., 6TH PM

Section 29: SENE;

U.S. Interest 25.00%

Jackson County

Colorado 40.000 Acres

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

BLM; CON: KFO

THE FOLLOWING **PUBLIC DOMAIN LANDS** ARE SUBJECT TO FILINGS IN THE MANNER SPECIFIED IN THE APPLICABLE PORTIONS OF THE REGULATIONS IN 43 CFR, SUBPART 3120.

**PARCEL ID: 6832**

T.0070N., R.0790W., 6TH PM

Section 27: SWSW;

Section 28: S2S2;

Section 29: SWNE,S2NW,S2;

Section 32: N2,SW;

Section 33: Lot 1-4;

Section 33: N2,NESW,NWSE;

Section 34: Lot 1-6;

Section 34: W2NE,NW;

Jackson County

Colorado 2126.400 Acres

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0070N., R.0790W., 6TH PM

Section 28: SESW;

Section 29: SESE;

Section 32: NWNW,NESW;

Section 33: Lot 3;  
Section 33: SENE;  
Section 34: Lot 1,2,5;  
Section 34: SWNE,S2NW;

The following lands are subject to Exhibit CO-07 to protect waterfowl and shorebird habitat and rookeries:

T.0070N., R.0790W., 6TH PM  
Section 29: SWNE,S2NW,SW,W2SE;  
Section 32: NWNW;

The following lands are subject to Exhibit CO-09 to protect big game winter habitat:

T.0070N., R.0790W., 6TH PM  
Section 29: SWNE,S2NW,S2;  
Section 32: N2,SW;

The following lands are subject to Exhibit CO-17 to protect white pelican nesting and feeding habitat:

T.0070N., R.0790W., 6TH PM  
Section 29: SWNE,S2NW,S2;  
Section 32: NWNW;

The following lands are subject to Exhibit CO-30 to alert lessee of closure period for nesting grouse species:

T.0070N., R.0790W., 6TH PM  
Section 29: S2SW;  
Section 32: NWNE,S2NE,W2;

BLM; CON: KFO

**PARCEL ID: 6792**

T.0070N., R.0790W., 6TH PM  
Section 32: SE;  
Section 33: W2SW;

Jackson County  
Colorado 240.000 Acres

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-09 to protect big game winter habitat:

T.0070N., R.0790W., 6TH PM  
Section 32: SE;

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0070N., R.0790W., 6TH PM  
Section 32: NWSE;

PVT/BLM; CON: KFO

**PARCEL ID: 6796**

T.0080N., R.0790W., 6TH PM

Section 19: Lot 4;  
Section 19: SESW,S2SE;  
Section 30: Lot 1,2;  
Section 30: NE,E2NW;

Jackson County  
Colorado 468.260 Acres

All lands are subject to Exhibit CO-09 to protect big game winter habitat

All lands are subject to Exhibit CO-29 to alert lessee of Class I and II paleontological area inventory requirement

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0080N., R.0790W., 6TH PM

Section 19: Lot 4;  
Section 19: SESE;  
Section 30: Lot 1;

BLM; CON: KFO

**PARCEL ID: 6840**

T.0090N., R.0790W., 6TH PM

Section 1: Lot 5-8,12;  
Section 6: Lot 2-4,8-13;  
Section 6: SWNE,W2SE;

Section 7: Lot 5-14;  
Section 7: W2NE;  
Section 18: Lot 5-12;  
Section 18: W2E2;  
Section 18: EXCL ROW COC09841;  
Section 19: Lot 1,2;  
Section 19: W2E2,E2NW,NESW,NESE;  
Section 19: EXCL ROW COC09841;

Jackson County  
Colorado 1741.110 Acres

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal



All lands are subject to Exhibit CO-39 to protect cultural resources

All lands are subject to Exhibit CO-09 to protect big game winter habitat

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0090N., R.0790W., 6TH PM

Section 1: Lot 7;  
Section 18: SWSE;  
Section 19: NESE;

The following lands are subject to Exhibit CO-30 to alert lessee of closure period for nesting grouse species:

T.0090N., R.0790W., 6TH PM

Section 1: Lot 12;  
Section 6: Lot 12;  
Section 7: Lot 6,7,11,12;

The following lands are subject to Exhibit CO-07 to protect waterfowl and shorebird habitat and rookeries:

T.0090N., R.0790W., 6TH PM

Section 18: Lot 10,11;  
Section 19: Lot 1,2;  
Section 19: SENW,NESW,SWSE;

BLM; CON: KFO

**PARCEL ID: 6831**

T.0090N., R.0790W., 6TH PM

Section 4: Lot 5,6,11,12;  
Section 10: S2SE;  
Section 14: SWNE,NW,S2;  
Section 15: NE;

Jackson County  
Colorado 932.170 Acres

All lands are subject to Exhibit CO-09 to protect big game winter habitat

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-15 to protect grouse winter habitat:

T.0090N., R.0790W., 6TH PM

Section 4: Lot 5,6,11,12;  
Section 14: SWNE,NESW,S2SW,SE;

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0090N., R.0790W., 6TH PM

Section 4: Lot 5,6,11;  
Section 10: S2SE;  
Section 14: NWNW,NWSW;  
Section 15: NENE;

The following lands are subject to Exhibit CO-30 to alert lessee of closure period for nesting grouse species:

T.0090N., R.0790W., 6TH PM

Section 4: Lot 5,6,11,12;  
Section 10: S2SE;  
Section 14: SWNE,NW,N2SW,SWSW;  
Section 15: NE;

The following lands are subject to Exhibit CO-02 to protect grouse dancing grounds:

T.0090N., R.0790W., 6TH PM

Section 10: SWSE;

BLM; CON: KFO

**PARCEL ID: 6839**

T.0090N., R.0790W., 6TH PM

Section 30: Lot 1-4;  
Section 30: E2,E2W2;  
Section 30: EXCL COC09841;

Jackson County

Colorado 511.371 Acres

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-07 to protect waterfowl and shorebird habitat and rookeries:

T.0090N., R.0790W., 6TH PM

Section 30: Lot 1-4;  
Section 30: NE,E2W2,N2SE,SWSE;

The following lands are subject to Exhibit CO-09 to protect big game winter habitat:

T.0090N., R.0790W., 6TH PM

Section 30: Lot 1-4;  
Section 30: NE,E2W2,N2SE,SWSE;

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0090N., R.0790W., 6TH PM

Section 30: SENE,NESE;

PVT/BLM; CON: KFO

**PARCEL ID: 6827**

T.0060N., R.0800W., 6TH PM

Section 20: E2NE EXCL COC 662;

Jackson County

Colorado 60.000 Acres

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

BLM; CON: KFO

**PARCEL ID: 6830**

T.0090N., R.0800W., 6TH PM

Section 2: Lot 1-4;

Section 2: S2N2,S2;

Section 3: SENE,E2SW,SE;

Section 4: Lot 4;

Section 4: SWNW;

Jackson County

Colorado 997.720 Acres

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-08 to protect special status plant species:

T.0090N., R.0800W., 6TH PM

Section 2: Lot 1-4;

Section 2: S2N2,S2;

Section 3: E2SW;

The following lands are subject to Exhibit CO-09 to protect big game winter habitat:

T.0090N., R.0800W., 6TH PM

Section 2: Lot 1-4;

Section 2: S2N2,S2;

Section 3: E2SW;

Section 4: Lot 4;

Section 4: SWNW;

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0090N., R.0800W., 6TH PM

Section 2: Lot 3-4;

Section 4: SWNW;

The following lands are subject to Exhibit CO-30 to alert lessee of closure period for nesting grouse species:

T.0090N., R.0800W., 6TH PM

Section 2: SESW,SE;  
Section 4: Lot 4;  
Section 4: SWNW;

The following lands are subject to Exhibit CO-03 to protect raptor nests:

T.0090N., R.0800W., 6TH PM

Section 3: E2SW;

The following lands are subject to Exhibit CO-18 to protect raptor nesting and fledgling habitat:

T.0090N., R.0800W., 6TH PM

Section 3: E2SW;

PVT/BLM; CON: KFO

**PARCEL ID: 6811**

T.0090N., R.0800W., 6TH PM

Section 10: ALL;  
Section 14: ALL;  
Section 15: ALL;

Jackson County

Colorado 1920.000 Acres

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-03 to protect raptor nests:

T.0090N., R.0800W., 6TH PM

Section 10: NWNE,N2NW;

The following lands are subject to Exhibit CO-08 to protect special status plant species:

T.0090N., R.0800W., 6TH PM

Section 10: W2NW;  
Section 14: NWNW;  
Section 15: N2,N2S2,SWSW;

All lands are subject to Exhibit CO-09 to protect big game winter habitat

The following lands are subject to Exhibit CO-18 to protect raptor nesting and fledgling habitat:

T.0090N., R.0800W., 6TH PM

Section 10: NWNE,NW;

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0090N., R.0800W., 6TH PM

Section 10: NWNW,NESE,S2SE;  
Section 14: NWNE,SENE,NENW,S2NW,NWSW,NESE,S2SE;  
Section 15: N2SE;

The following lands are subject to Exhibit CO-15 to protect grouse winter habitat:

T.0090N., R.0800W., 6TH PM

Section 14: SW;  
Section 15: SW;

The following lands are subject to Exhibit CO-30 to alert lessee of closure period for nesting grouse species:

T.0090N., R.0800W., 6TH PM

Section 14: NE,NENW,S2NW,S2;  
Section 15: S2NE,SENE,S2;

BLM; CON: KFO

**PARCEL ID: 6838**

T.0090N., R.0800W., 6TH PM

Section 11: ALL;  
Section 12: ALL;  
Section 13: ALL;  
Section 13: EXCL COC09841;

Jackson County

Colorado 1833.281 Acres

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-08 to protect special status plant species:

T.0090N., R.0800W., 6TH PM

Section 11: N2N2,SWNW,W2SW;

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0090N., R.0800W., 6TH PM

Section 11: NE,NENW,S2NW,NWSW,W2SE;  
Section 12: SWNW,NWSW,S2SW;  
Section 13: SWNE,N2NW,SWNW,SESW,W2SE;

The following lands are subject to Exhibit CO-02 to protect grouse dancing grounds:

T.0090N., R.0800W., 6TH PM

Section 12: NW;

The following lands are subject to Exhibit CO-07 to protect waterfowl and shorebird habitat and rookeries:

T.0090N., R.0800W., 6TH PM

Section 13: SENE,SE;

The following lands are subject to Exhibit CO-30 to alert lessee of closure period for nesting grouse species:

T.0090N., R.0800W., 6TH PM  
Section 13: SWSW,N2;

BLM; CON: KFO

**PARCEL ID: 6829**

T.0090N., R.0800W., 6TH PM  
Section 17: N2NE;  
Section 20: N2NW,SWNW;  
Section 21: E2E2,SWSE;

Jackson County  
Colorado 400.000 Acres

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-15 to protect grouse winter habitat:

T.0090N., R.0800W., 6TH PM  
Section 17: N2NE;  
Section 20: N2NW,SWNW;  
Section 21: SENE,NESE,S2SE;

The following lands are subject to Exhibit CO-08 to protect special status plant species:

T.0090N., R.0800W., 6TH PM  
Section 21: E2E2,SWSE;

The following lands are subject to Exhibit CO-09 to protect big game winter habitat:

T.0090N., R.0800W., 6TH PM  
Section 21: E2E2,SWSE;

The following lands are subject to Exhibit CO-30 to alert lessee of closure period for nesting grouse species:

T.0090N., R.0800W., 6TH PM  
Section 21: E2E2,SWSE;

The following lands are subject to Exhibit KR-02 to protect endangered plants of the North Park Phacelia Area of Critical Environmental Concern:

T.0090N., R.0800W., 6TH PM  
Section 21: E2E2,SWSE;

BLM; CON: KFO

**PARCEL ID: 6810**

T.0090N., R.0800W., 6TH PM

Section 22: ALL;  
Section 23: ALL;  
Section 27: ALL;

Jackson County  
Colorado 1920.000 Acres

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-02 to protect grouse dancing grounds:

T.0090N., R.0800W., 6TH PM

Section 22: NE,N2SE,SESE;  
Section 23: SWNW,W2SW;

The following lands are subject to Exhibit CO-08 to protect special status plant species:

T.0090N., R.0800W., 6TH PM

Section 22: W2W2;  
Section 27: W2NW,NWSW;

All lands are subject to Exhibit CO-09 to protect big game winter habitat

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0090N., R.0800W., 6TH PM

Section 22: S2NE,SE;  
Section 23: NWNE,S2NE,N2NW,SWNW,S2;  
Section 27: N2NE,NENW,N2S2,SESE;

The following lands are subject to Exhibit CO-30 to alert lessee of closure period for nesting grouse species:

T.0090N., R.0800W., 6TH PM

Section 22: ALL;  
Section 23: ALL;  
Section 27: N2,N2SW,SE;

The following lands are subject to Exhibit KR-02 to protect endangered plants of the North Park Phacelia Area of Critical Environmental Concern:

T.0090N., R.0800W., 6TH PM

Section 22: W2W2;

The following lands are subject to Exhibit CO-15 to protect grouse winter habitat:

T.0090N., R.0800W., 6TH PM

Section 23: NWNE,S2NE,NW,S2;

BLM; CON: KFO

**PARCEL ID: 6809**

T.0090N., R.0800W., 6TH PM

Section 28: NE,NENW,S2NW,S2;  
Section 32: N2NE,SENE,SWNW,SE;  
Section 33: ALL;  
Section 34: ALL;

Jackson County

Colorado 2200.000 Acres

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-02 to protect grouse dancing grounds:

T.0090N., R.0800W., 6TH PM

Section 28: NE;

The following lands are subject to Exhibit CO-08 to protect special status plant species:

T.0090N., R.0800W., 6TH PM

Section 28: E2,E2W2,SWNW,W2SW;  
Section 32: NWNE,W2SE;N2NE,SENE,SE;  
Section 33: ALL;

The following lands are subject to Exhibit CO-09 to protect big game winter habitat:

T.0090N., R.0800W., 6TH PM

Section 28: E2,E2W2,SWNW,W2SW;  
Section 32: N2NE,SENE,SE;  
Section 33: ALL;  
Section 34: ALL;

The following lands are subject to Exhibit CO-15 to protect grouse winter habitat:

T.0090N., R.0800W., 6TH PM

Section 28: NE,NENW;

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0090N., R.0800W., 6TH PM

Section 28: SWNW,NWSW;SWSW;  
Section 33: W2NW,NWSW,SESE;  
Section 34: NE,S2NW,NWSW,S2SW,W2SE;

The following lands are subject to Exhibit CO-30 to alert lessee of closure period for nesting grouse species:

T.0090N., R.0800W., 6TH PM

Section 28: NE,NENW;

The following lands are subject to Exhibit KR-02 to protect endangered plants of the North Park Phacelia Area of Critical Environmental Concern:



T.0090N., R.0800W., 6TH PM  
Section 28: N2NE;

The following lands are subject to Exhibit CO-18 to protect raptor nesting and fledgling habitat:

T.0090N., R.0800W., 6TH PM  
Section 32: N2NE;SWNW;

PVT/BLM; CON: KFO

**PARCEL ID: 6826**

T.0100N., R.0800W., 6TH PM  
Section 1: SWNE;

Jackson County  
Colorado 40.000 Acres

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

All lands are subject to Exhibit CO-09 to protect big game winter habitat

BLM; CON: KFO

**PARCEL ID: 6797**

T.0100N., R.0800W., 6TH PM  
Section 4: SW;  
Section 5: Lot 1-4;  
Section 5: S2N2,S2;  
Section 6: Lot 1-7;  
Section 6: S2NE,SE,SW,E2SW,SE;

Jackson County  
Colorado 1443.440 Acres

All lands are subject to Exhibit CO-09 to protect big game winter habitat

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0100N., R.0800W., 6TH PM  
Section 4: N2SW;  
Section 5: Lot 1,2;  
Section 5: S2NE,N2S2;  
Section 6: Lot 4-6;

Section 6: NESW,SE;

The following lands are subject to Exhibit CO-15 to protect grouse winter habitat:

T.0100N., R.0800W., 6TH PM

Section 5: S2SW;

Section 6: SESW,S2SE;

BLM; CON: KFO

**PARCEL ID: 6798**

T.0100N., R.0800W., 6TH PM

Section 7: Lot 1-4;

Section 7: E2,E2W2;

Section 8: ALL;

Section 17: ALL;

Section 18: Lot 1-4;

Section 18: E2,E2W2;

Jackson County

Colorado 2555.200 Acres

All lands are subject to Exhibit CO-09 to protect big game winter habitat

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-08 to protect special status plant species:

T.0100N., R.0800W., 6TH PM

Section 7: E2E2;

Section 8: NWNE,S2NE,NW,S2;

Section 17: E2,N2NW,SENE,NESW;

The following lands are subject to Exhibit CO-15 to protect grouse winter habitat:

T.0100N., R.0800W., 6TH PM

Section 7: NE,NESE;

Section 8: SWNE,NW,S2;

Section 18: SESE;

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0100N., R.0800W., 6TH PM

Section 7: Lot 2;

Section 7: NENE,S2NE,SENE,N2SE;

Section 8: S2NE,NWSW,S2SW;

Section 17: E2E2,SWNE,E2NW;

Section 18: Lot 3;

Section 18: E2SW;

The following lands are subject to Exhibit CO-30 to alert lessee of closure period for nesting grouse species:

T.0100N., R.0800W., 6TH PM

Section 7: Lot 4;  
Section 7: SESW;  
Section 18: Lot 1-4;  
Section 18: SWNE,E2W2,W2SE;

BLM; CON: KFO

**PARCEL ID: 6804**

T.0100N., R.0800W., 6TH PM

Section 9: ALL;

Jackson County  
Colorado 640.000 Acres

All lands are subject to Exhibit CO-09 to protect big game winter habitat

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-08 to protect special status plant species:

T.0100N., R.0800W., 6TH PM

Section 9: SWSW;

The following lands are subject to Exhibit CO-15 to protect grouse winter habitat:

T.0100N., R.0800W., 6TH PM

Section 9: SWSW;

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0100N., R.0800W., 6TH PM

Section 9: E2NE,SESE;

PVT/BLM; CON: KFO

**PARCEL ID: 6806**

T.0100N., R.0800W., 6TH PM

Section 10: S2NW,SW,W2SE;  
Section 15: W2E2,W2;  
Section 21: ALL;  
Section 22: W2E2,W2;  
Section 27: W2NE,E2NW,NWNW,NESW;  
Section 28: NENW,W2W2;

Jackson County  
Colorado 2360.000 Acres

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-09 to protect big game winter habitat:

T.0100N., R.0800W., 6TH PM

- Section 10: S2NW,SW,W2SE;
- Section 15: W2E2,W2;
- Section 21: ALL;
- Section 22: W2E2,W2;
- Section 27: W2NE,N2NW,SESW,NESW;
- Section 28: NENW,W2W2;

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0100N., R.0800W., 6TH PM

- Section 10: SWNW,S2SW,SWSE;
- Section 15: SWNE,S2NW,N2SW,SWSW,NWSE;
- Section 21: W2NW,N2SW,SESW,SWSE;
- Section 27: NESW;
- Section 28: N2NW,NWSW;

The following lands are subject to Exhibit CO-15 to protect grouse winter habitat:

T.0100N., R.0800W., 6TH PM

- Section 15: SWSW;
- Section 22: SWNE,W2,W2SE;
- Section 27: W2NE,N2NW,SESW,NESW;
- Section 28: NENW,W2W2;

The following lands are subject to Exhibit CO-08 to protect special status plant species:

T.0100N., R.0800W., 6TH PM

- Section 21: N2,N2SW,SESW,SE;
- Section 22: W2SW;
- Section 27: SWNE,N2NW,SESW,NESW;

The following lands are subject to Exhibit CO-30 to alert lessee of closure period for nesting grouse species:

T.0100N., R.0800W., 6TH PM

- Section 21: NESW,S2SW,SE;
- Section 22: SW,W2SE;
- Section 27: W2NE,N2NW,SESW,NESW;
- Section 28: NENW,W2W2;

BLM; CON: KFO

**PARCEL ID: 6799**

T.0100N., R.0800W., 6TH PM

- Section 19: Lot 1-4;
- Section 19: E2,E2W2;

Section 20: ALL;  
Section 29: ALL;  
Section 30: Lot 1-4;  
Section 30: E2,E2W2;

Jackson County  
Colorado 2536.400 Acres

All lands are subject to Exhibit CO-09 to protect big game winter habitat

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-15 to protect grouse winter habitat:

T.0100N., R.0800W., 6TH PM

Section 19: E2E2,SWSE;  
Section 29: E2,N2NW,SEW;  
Section 30: Lot 1;  
Section 30: N2NE,NENW;

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0100N., R.0800W., 6TH PM

Section 19: Lot 1;  
Section 19: NWNE,S2NE,NENW,SESE;  
Section 20: NENE,SWNW,SW,SWSE;  
Section 29: N2NE,NENW,SESW,NESE,S2SE;  
Section 30: Lot 2,4;  
Section 30: N2NE,E2NW,NESW,W2SE;

The following lands are subject to Exhibit CO-30 to alert lessee of closure period for nesting grouse species:

T.0100N., R.0800W., 6TH PM

Section 19: Lot 1-4;  
Section 19: W2NE,E2W2,NWSE;  
Section 29: E2E2,SWNW,SW;  
Section 30: Lot 2-4;  
Section 30: S2NE,SEW,E2SW,SE;

The following lands are subject to Exhibit CO-08 to protect special status plant species:

T.0100N., R.0800W., 6TH PM

Section 20: N2NE,SENE;

The following lands are subject to Exhibit CO-02 to protect grouse dancing grounds:

T.0100N., R.0800W., 6TH PM

Section 29: NE;

BLM; CON: KFO

**PARCEL ID: 6807**

T.0100N., R.0800W., 6TH PM

Section 23: S2SE;  
Section 24: S2SW;  
Section 25: W2NW,S2;  
Section 26: E2,E2SW,SWSW;  
Section 35: ALL;

Jackson County

Colorado 1640.000 Acres

All lands are subject to Exhibit CO-09 to protect big game winter habitat

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-15 to protect grouse winter habitat:

T.0100N., R.0800W., 6TH PM

Section 23: S2SE;  
Section 24: S2SW;  
Section 25: W2NW;  
Section 26: NE;

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0100N., R.0800W., 6TH PM

Section 26: SWSW;  
Section 35: NWNW,S2NW,NESW,SWSW,N2SE;

The following lands are subject to Exhibit CO-08 to protect special status plant species:

T.0100N., R.0800W., 6TH PM

Section 35: SWNE,NW,S2;

BLM; CON: KFO

**PARCEL ID: 6805**

T.0100N., R.0800W., 6TH PM

Section 31: Lot 1-4;  
Section 31: NE,E2NW;  
Section 32: ALL;  
Section 33: NENW,W2W2;

Jackson County

Colorado 1224.380 Acres

All lands are subject to Exhibit CO-09 to protect big game winter habitat

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-02 to protect grouse dancing grounds:

T.0100N., R.0800W., 6TH PM

Section 31: Lot 1,2;  
Section 31: E2NW;  
Section 32: SW;

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0100N., R.0800W., 6TH PM

Section 31: Lot 1;  
Section 31: N2NE,SENE,NENW;

The following lands are subject to Exhibit CO-15 to protect grouse winter habitat:

T.0100N., R.0800W., 6TH PM

Section 32: NWNE,S2NE,NESE;  
Section 33: N2NW,SWNW,NWSW;

The following lands are subject to Exhibit CO-30 to alert lessee of closure period for nesting grouse species:

T.0100N., R.0800W., 6TH PM

Section 32: NENE,W2,NWSE,S2SE;  
Section 33: N2NW,SWNW,SWSW;

BLM; CON: KFO

**PARCEL ID: 6828**

T.0110N., R.0800W., 6TH PM

Section 4: Lot 2-4;  
Section 4: S2;  
Section 5: Lot 2-4;  
Section 31: Lot 1-4;  
Section 31: E2,E2W2;  
Section 32: SW;

Jackson County

Colorado 1370.680 Acres

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-02 to protect grouse dancing grounds:

T.0110N., R.0800W., 6TH PM

Section 4: Lot 3,4;

The following lands are subject to Exhibit CO-30 to alert lessee of closure period for nesting grouse species:

T.0110N., R.0800W., 6TH PM

Section 4: Lot 2,4;

Section 4: S2;  
Section 5: Lot 2-4;

The following lands are subject to Exhibit CO-09 to protect big game winter habitat:

T.0110N., R.0800W., 6TH PM

Section 31: Lot 1-4;  
Section 31: E2,E2W2;  
Section 32: SW;

The following lands are subject to Exhibit CO-10 to protect elk calving:

T.0110N., R.0800W., 6TH PM

Section 31: N2NE;

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0110N., R.0800W., 6TH PM

Section 31: Lot 1-4;  
Section 31: NWNE,S2NE,NENW,NESW,SESE;  
Section 32: NESW,S2SW;

PVT/BLM; CON: KFO

**PARCEL ID: 6795**

T.0060N., R.0810W., 6TH PM

Section 1: Lot 4;  
Section 1: S2N2,N2S2,S2SW,SWSE;  
Section 2: SENE,E2SE;  
Section 3: Lot 1-3,5-8;  
Section 3: S2NE,SENE,E2SW,SE;  
Section 10: NE,N2SE;  
Section 11: S2NE,N2SE;  
Section 12: SENE,NWNW,E2SE,SWSE;  
Section 13: NWNE,SESW;  
Section 15: Lot 1-3;

Jackson County

Colorado 2066.490 Acres

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-09 to protect big game winter habitat:

T.0060N., R.0810W., 6TH PM

Section 1: Lot 4;  
Section 1: S2N2,SW,N2SE,SWSE;  
Section 2: SENE,E2SE;  
Section 3: Lot 1-3,5-8;  
Section 3: S2NE,SENE,E2SW,SE;  
Section 10: NE,N2SE;



Section 11: S2NE,N2SE;  
Section 12: SENE,NWNW,NESE,S2SE;  
Section 13: NWNE;  
Section 15: Lot 1;

The following lands are subject to Exhibit CO-16 to protect greater sandhill crane nesting and staging habitat:

T.0060N., R.0810W., 6TH PM

Section 1: S2NE,E2SW,N2SE,SWSE;  
Section 10: SENE,NESE;  
Section 11: S2NE,N2SE;  
Section 12: SENE,NESE,S2SE;  
Section 13: NWNE;

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0060N., R.0810W., 6TH PM

Section 1: Lot 4;  
Section 1: SWNW,NWSW;  
Section 2: SENE,NESE;  
Section 3: SENW,SWNE,NWSE,S2SE;  
Section 10: NENE,SWNE,NWSE;  
Section 12: SENE,E2SE;  
Section 15: Lot 2,3;

The following lands are subject to Exhibit CO-10 to protect elk calving:

T.0060N., R.0810W., 6TH PM

Section 3: Lot 1-3;5-8;  
Section 3: S2NE,SENE,E2SW,N2SE,SWSE;  
Section 15: Lot 1;

The following lands are subject to Exhibit CO-27 to protect steep slopes:

T.0060N., R.0810W., 6TH PM

Section 2: Lot 4;  
Section 3: Lot 1-3, 5-7;  
Section 3: NWSW;

BLM; CON: KFO

**PARCEL ID: 6791**

T.0060N., R.0810W., 6TH PM

Section 2: Lot 3-4;  
Section 2: S2NW,SW;  
Section 10: NW,N2SW,SWSW;  
Section 11: N2NE,W2,S2SE;  
Section 13: NENW;  
Section 14: S2NW,N2SW;  
Section 15: S2NE,W2W2,NESW,N2SE;

Jackson County  
Colorado 1639.080 Acres

All lands are subject to Exhibit CO-09 to protect big game winter habitat

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-10 to protect elk calving:

T.0060N., R.0810W., 6TH PM

Section 2: Lot 3,4;  
Section 2: S2NW,NWSW;  
Section 10: NWNW;  
Section 15: SWSW;

The following lands are subject to Exhibit CO-16 to protect greater sandhill crane nesting and staging habitat:

T.0060N., R.0810W., 6TH PM

Section 10: N2SW,SWSW;  
Section 11: S2NW,SW,S2SE;  
Section 13: NENW;  
Section 15: W2NW,NWSW;

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0060N., R.0810W., 6TH PM

Section 10: SENW;  
Section 11: NWNW;  
Section 14: NESW;  
Section 15: SWNE,SWNW,N2SW;

PVT/BLM; CON: KFO

**PARCEL ID: 6793**

T.0070N., R.0810W., 6TH PM

Section 25: E2,N2SW;

Jackson County

Colorado 400.000 Acres

All lands are subject to Exhibit CO-01 to protect the integrity of existing coal mine operations

All lands are subject to Exhibit CO-09 to protect big game winter habitat

All lands are subject to Exhibit CO-25 to protect surface or underground coal mines

All lands are subject to Exhibit CO-30 to alert lessee of closure period for nesting grouse species

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-02 to protect grouse dancing grounds:

T.0070N., R.0810W., 6TH PM  
Section 25: NE,N2S2;

PVT/BLM; CON: KFO

**PARCEL ID: 6794**

T.0070N., R.0810W., 6TH PM  
Section 26: N2N2,SWNW,NWSW;  
Section 35: S2N2,S2;

Jackson County  
Colorado 720.000 Acres

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-01 to protect the integrity of existing coal mine operations:

T.0070N., R.0810W., 6TH PM  
Section 26: N2N2,SWNW;

The following lands are subject to Exhibit CO-09 to protect big game winter habitat:

T.0070N., R.0810W., 6TH PM  
Section 26: N2NE;  
Section 35: S2N2,S2;

The following lands are subject to Exhibit CO-25 to protect surface or underground coal mines:

T.0070N., R.0810W., 6TH PM  
Section 26: N2N2,SWNW;

The following lands are subject to Exhibit CO-30 to alert lessee of closure period for nesting grouse species:

T.0070N., R.0810W., 6TH PM  
Section 26: N2N2,SWNW,NWSW;  
Section 35: S2N2,NESW,N2SE,SESE;

The following lands are subject to Exhibit CO-10 to protect elk calving:

T.0070N., R.0810W., 6TH PM  
Section 35: NWSW,S2SW;

PVT/BLM; CON: KFO

**PARCEL ID: 6800**

T.0070N., R.0810W., 6TH PM

Section 27: NWNW,S2NW,SW;  
Section 28: E2,NW,N2SW;

Jackson County  
Colorado 840.000 Acres

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-01 to protect the integrity of existing coal mine operations:

T.0070N., R.0810W., 6TH PM

Section 27: NWNW,S2NW,SW;  
Section 28: E2,N2NW;

The following lands are subject to Exhibit CO-09 to protect big game winter habitat:

T.0070N., R.0810W., 6TH PM

Section 27: S2SW;  
Section 28: SESE;

The following lands are subject to Exhibit CO-25 to protect surface or underground coal mines:

T.0070N., R.0810W., 6TH PM

Section 27: NWNW,S2NW,SW;  
Section 28: E2,N2NW;

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0070N., R.0810W., 6TH PM

Section 28: S2SE;

PVT/BLM; CON: KFO

**PARCEL ID: 6808**

T.0070N., R.0810W., 6TH PM

Section 27: NENE;

Jackson County  
Colorado 40.000 Acres

All lands are subject to Exhibit CO-01 to protect the integrity of existing coal mine operations

All lands are subject to Exhibit CO-25 to protect surface or underground coal mines

All lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

BLM; CON: KFO

**PARCEL ID: 6824**

T.0090N., R.0810W., 6TH PM

Section 2: Lot 11-13,16,17;  
Section 3: Lot 7-18;  
Section 4: Lot 1,2;  
Section 4: S2NE,N2SE,SESE;  
Section 9: E2E2;  
Section 10: Lot 5-12;  
Section 10: W2W2,SESW;  
Section 11: Lot 6,7;  
Section 15: NW,N2SW,NWSE;  
Section 19: NWSE;

Jackson County  
Colorado 1752.440 Acres

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0090N., R.0810W., 6TH PM

Section 2: Lot 11,12,16,17;  
Section 3: Lot 12,13,15,18;  
Section 4: Lot 2;  
Section 4: S2NE,NESE;  
Section 10: Lot 7,8;

The following lands are subject to Exhibit CO-09 to protect big game winter habitat:

T.0090N., R.0810W., 6TH PM

Section 3: Lot 8-18;  
Section 4: Lot 1,2;  
Section 4: S2NE,N2SE,SESE;  
Section 9: E2E2;  
Section 10: Lot 5-9,11,12;  
Section 10: W2W2,SESW;  
Section 15: NW,N2SW,NWSE;

The following lands are subject to Exhibit CO-10 to protect elk calving:

T.0090N., R.0810W., 6TH PM

Section 4: NWSE,SESE;  
Section 9: E2E2;  
Section 10: W2W2,SESW;  
Section 15: NW;  
Section 19: NWSE;

The following lands are subject to Exhibit CO-18 to protect raptor nesting and fledgling habitat:

T.0090N., R.0810W., 6TH PM

Section 4: SESE;  
Section 9: E2E2;  
Section 10: Lot 8;  
Section 10: W2W2,SESW;  
Section 15: NW,N2SW,NWSE;

The following lands are subject to Exhibit CO-29 to alert lessee of Class I and II paleontological area inventory requirement:

T.0090N., R.0810W., 6TH PM

Section 4: Lot 1,2;  
Section 4: S2NE,N2SE,SESE;  
Section 9: E2NE;

The following lands are subject to Exhibit CO-03 to protect raptor nests:

T.0090N., R.0810W., 6TH PM

Section 9: E2SE;  
Section 15: S2NW,N2SW;

The following lands are subject to Exhibit CO-05 to protect peregrine falcon cliff nesting complex:

T.0090N., R.0810W., 6TH PM

Section 9: E2SE;  
Section 15: W2NW;

The following lands are subject to Exhibit CO-24 to protect peregrine falcon cliff nesting complex:

T.0090N., R.0810W., 6TH PM

Section 9: SENE,E2SE;  
Section 10: NWSW,S2SW;  
Section 15: NW,N2SW;

The following lands are subject to Exhibit CO-27 to protect steep slopes:

T.0090N., R.0810W., 6TH PM

Section 3: SWNE, SWSE, NESW;  
Section 4: N2NE, NWSW;  
Section 15: N2SW;

The following lands are subject to Exhibit CO-30 to alert lessee of closure period for nesting grouse species:

T.0090N., R.0810W., 6TH PM

Section 19: NWSE;

BLM; CON: KFO

**PARCEL ID: 6801**

T.0090N., R.0810W., 6TH PM

Section 7: Lot 4;  
Section 18: Lot 1-4;  
Section 18: SWNE,SENW,E2SW,SE;

Section 19: Lot 1-4;  
Section 19: N2NE,SWNE,E2NW,NESW;  
Section 20: NWNW;

Jackson County  
Colorado 966.050 Acres

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-09 to protect big game winter habitat:

T.0090N., R.0810W., 6TH PM

Section 7: Lot 4;  
Section 18: Lot 1-4;  
Section 18: SWNE,SE,SE,  
Section 19: Lot 1-3;  
Section 19: W2NE,E2NW;

The following lands are subject to Exhibit CO-10 to protect elk calving:

T.0090N., R.0810W., 6TH PM

Section 7: Lot 4;  
Section 18: Lot 1-4;  
Section 18: SWNE,SE,SE,  
Section 19: Lot 1-4;  
Section 19: N2NE,SWNE,E2NW,NESW;

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0090N., R.0810W., 6TH PM

Section 7: Lot 4;  
Section 18: Lot 1, 3,4;  
Section 18: NWSE;  
Section 19: 1, 4;  
Section 19: NENW, NENE;  
Section 20: NWNW;

The following lands are subject to Exhibit CO-27 to protect steep slopes:

T.0090N., R.0810W., 6TH PM

Section 18: SENW;

The following lands are subject to Exhibit CO-30 to alert lessee of closure period for nesting grouse species:

T.0090N., R.0810W., 6TH PM

Section 19: Lot 3,4;  
Section 19: NESW;

PVT/BLM; CON: KFO

**PARCEL ID: 6802**

T.0090N., R.0810W., 6TH PM

Section 27: E2SW,W2SE;

Section 33: SESW,SESE;

Jackson County

Colorado 240.000 Acres

All lands are subject to Exhibit CO-09 to protect big game winter habitat

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-10 to protect elk calving:

T.0090N., R.0810W., 6TH PM

Section 27: SESW,SWSE;

Section 33: SESE;

The following lands are subject to Exhibit CO-30 to alert lessee of closure period for nesting grouse species:

T.0090N., R.0810W., 6TH PM

Section 27: E2SW,W2SE;

The following lands are subject to Exhibit CO-03 to protect raptor nests:

T.0090N., R.0810W., 6TH PM

Section 33: SESE;

The following lands are subject to Exhibit CO-18 to protect raptor nesting and fledgling habitat:

T.0090N., R.0810W., 6TH PM

Section 33: SESE;

The following lands are subject to Exhibit CO-27 to protect steep slopes:

T.0090N., R.0810W., 6TH PM

Section 33: SESE;

PVT/BLM; CON: KFO

**PARCEL ID: 6803**

T.0090N., R.0810W., 6TH PM

Section 31: Lot 1-3;

Section 31: NENE,S2NE,SESW,NESW,N2SE;

Section 32: W2NE,W2,NWSE;

Jackson County

Colorado 842.860 Acres



All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-02 to protect grouse dancing grounds:

T.0090N., R.0810W., 6TH PM

Section 31: NENE;

The following lands are subject to Exhibit CO-10 to protect elk calving:

T.0090N., R.0810W., 6TH PM

Section 31: Lot 3;

The following lands are subject to Exhibit CO-30 to alert lessee of closure period for nesting grouse species:

T.0090N., R.0810W., 6TH PM

Section 31: Lot 1-3;

Section 31: NENE,S2NE,SESW,NESW,N2SE;

Section 32: W2NE,W2,NWSE;

PVT/BLM; CON: KFO

**PARCEL ID: 6825**

T.0100N., R.0810W., 6TH PM

Section 9: E2,E2W2;

Section 10: W2;

Section 17: W2NE,NW,N2SW,SWSW;

Section 17: NWSE;

Jackson County

Colorado 1200.000 Acres

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-09 to protect big game winter habitat:

T.0100N., R.0810W., 6TH PM

Section 9: E2,E2W2;

Section 10: W2;

Section 17: W2W2,SESW,NESW;

The following lands are subject to Exhibit CO-27 to protect steep slopes:

T.0100N., R.0810W., 6TH PM

Section 17: NWNW, SWSW;

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0100N., R.0810W., 6TH PM

Section 9: SWNE,SWSE;  
Section 17: NW;

The following lands are subject to Exhibit CO-07 to protect waterfowl and shorebird habitat and rookeries:

T.0100N., R.0810W., 6TH PM

Section 17: W2NE,NW,N2SW,NWSE;

The following lands are subject to Exhibit CO-29 to alert lessee of Class I and II paleontological area inventory requirement:

T.0100N., R.0810W., 6TH PM

Section 17: W2NE,NW,NESW,W2SW,NWSE;

PVT/BLM; CON: KFO

**ATTACHMENT B:**

***Recommended Parcel Deferrals  
June 2014 - Colorado Competitive Oil & Gas Lease Sale***

THE FOLLOWING **ACQUIRED LANDS** ARE SUBJECT TO FILINGS IN THE MANNER SPECIFIED IN THE APPLICABLE PORTIONS OF THE REGULATIONS IN 43 CFR, SUBPART 3120.

**PARCEL ID: 6835**

**Acres Nominated: 40.00 Acres**

**Available Acres: 0 Acres**

**Deferred Portion: All 40.00 Acres of Parcel ID:**

T.0070N., R.0790W., 6TH PM

Section 29: SENE; U.S. Interest 25.00% **DEFER ALL for Priority Sage-grouse habitat**

Jackson County  
Colorado

BLM; CON: KFO

THE FOLLOWING **PUBLIC DOMAIN LANDS** ARE SUBJECT TO FILINGS IN THE MANNER SPECIFIED IN THE APPLICABLE PORTIONS OF THE REGULATIONS IN 43 CFR, SUBPART 3120.

**PARCEL ID: 6832**

**Acres Nominated: 2126.400 Acres**

**Available Acres: 0 Acres**

**Deferred Portion: All 2126.400 Acres of Parcel ID:**

T.0070N., R.0790W., 6TH PM

Section 27: SWSW; **DEFER ALL for Priority Sage-grouse habitat**

Section 28: S2S2; **DEFER ALL for Priority Sage-grouse habitat**

Section 29: SWNE,S2NW,S2; **DEFER ALL for Priority Sage-grouse habitat**

Section 32: N2,SW; **DEFER ALL for Priority Sage-grouse habitat**

Section 33: Lot 1-4; **DEFER ALL for Priority Sage-grouse habitat**

Section 33: N2,NESW,NWSE; **DEFER ALL for Priority Sage-grouse habitat**

Section 34: Lot 1-6; **DEFER ALL for Priority Sage-grouse habitat**

Section 34: W2NE,NW; **DEFER ALL for Priority Sage-grouse habitat**

Jackson County  
Colorado

BLM; CON: KFO

**PARCEL ID: 6792**

**Acres Nominated: 240.000 Acres**

**Available Acres: 0 Acres**

**Deferred Portion: All 240.000 Acres of Parcel ID:**

T.0070N., R.0790W., 6TH PM

Section 32: SE; DEFER ALL for Priority Sage-grouse habitat  
Section 33: W2SW; DEFER ALL for Priority Sage-grouse habitat

Jackson County  
Colorado

PVT/BLM; CON: KFO

**PARCEL ID: 6796**  
**Acres Nominated: 468.260 Acres**  
**Available Acres: 0 Acres**  
**Deferred Portion: All 468.260 Acres of Parcel ID:**

T.0080N., R.0790W., 6TH PM

Section 19: Lot 4; DEFER ALL for Priority Sage-grouse habitat  
Section 19: SESW,S2SE; DEFER ALL for Priority Sage-grouse habitat  
Section 30: Lot 1,2; DEFER ALL for Priority Sage-grouse habitat  
Section 30: NE,E2NW; DEFER ALL for Priority Sage-grouse habitat

Jackson County  
Colorado

BLM; CON: KFO

**PARCEL ID: 6840**  
**Acres Nominated: 1741.110 Acres**  
**Available Acres: 0 Acres**  
**Deferred Portion: All 1741.110 Acres of Parcel ID:**

T.0090N., R.0790W., 6TH PM

Section 1: Lot 5-8,12; DEFER ALL for Priority Sage-grouse habitat  
Section 6: Lot 2-4,8-13; DEFER ALL for Priority Sage-grouse habitat  
Section 6: SWNE,W2SE; DEFER ALL for Priority Sage-grouse habitat  
Section 7: Lot 5-14; DEFER ALL for Priority Sage-grouse habitat  
Section 7: W2NE; DEFER ALL for Priority Sage-grouse habitat  
Section 18: Lot 5-12; DEFER ALL for Priority Sage-grouse habitat  
Section 18: W2E2; DEFER ALL for Priority Sage-grouse habitat  
Section 18: EXCL ROW COC09841; DEFER ALL for Priority Sage-grouse habitat  
Section 19: Lot 1,2; DEFER ALL for Priority Sage-grouse habitat  
Section 19: W2E2,E2NW,NESW,NESE; DEFER ALL for Priority Sage-grouse habitat  
Section 19: EXCL ROW COC09841; DEFER ALL for Priority Sage-grouse habitat

Jackson County  
Colorado  
BLM; CON: KFO

**PARCEL ID: 6831**  
**Acres Nominated: 932.170 Acres**  
**Available Acres: 0 Acres**  
**Deferred Portion: All 932.170 Acres of Parcel ID:**

T.0090N., R.0790W., 6TH PM

Section 4: Lot 5,6,11,12; DEFER ALL for Priority Sage-grouse habitat

Section 10: S2SE; DEFER ALL for Priority Sage-grouse habitat  
Section 14: SWNE,NW,S2; DEFER ALL for Priority Sage-grouse habitat  
Section 15: NE; DEFER ALL for Priority Sage-grouse habitat

Jackson County  
Colorado

BLM; CON: KFO

**PARCEL ID: 6839**  
**Acres Nominated: 511.371 Acres**  
**Available Acres: 0 Acres**  
**Deferred Portion: All 511.371 Acres of Parcel ID:**

T.0090N., R.0790W., 6TH PM

Section 30: Lot 1-4; DEFER ALL for Priority Sage-grouse habitat  
Section 30: E2,E2W2; DEFER ALL for Priority Sage-grouse habitat  
Section 30: EXCL COC09841; DEFER ALL for Priority Sage-grouse habitat

Jackson County  
Colorado

PVT/BLM; CON: KFO

**PARCEL ID: 6827**  
**Acres Nominated: 60.000 Acres**  
**Available Acres: 0 Acres**  
**Deferred Portion: All 60.000 Acres of Parcel ID:**

T.0060N., R.0800W., 6TH PM

Section 20: E2NE EXCL COC 662; DEFER ALL for Priority Sage-grouse habitat

Jackson County  
Colorado

BLM; CON: KFO

**PARCEL ID: 6830**  
**Acres Nominated: 997.720 Acres**  
**Available Acres: 0 Acres**  
**Deferred Portion: All 997.720 Acres of Parcel ID:**

T.0090N., R.0800W., 6TH PM

Section 2: Lot 1-4; DEFER ALL for Priority Sage-grouse habitat  
Section 2: S2N2,S2; DEFER ALL for Priority Sage-grouse habitat  
Section 3: SENE,E2SW,SE; DEFER ALL for Priority Sage-grouse habitat  
Section 4: Lot 4; DEFER ALL for Priority Sage-grouse habitat  
Section 4: SWNW; DEFER ALL for Priority Sage-grouse habitat

Jackson County  
Colorado

PVT/BLM; CON: KFO

**PARCEL ID: 6811**

**Acres Nominated: 1920.000 Acres**

**Available Acres: 0 Acres**

**Deferred Portion: All 1920.000 Acres of Parcel ID:**

T.0090N., R.0800W., 6TH PM

Section 10: ALL; DEFER ALL for Priority Sage-grouse habitat

Section 14: ALL; DEFER ALL for Priority Sage-grouse habitat

Section 15: ALL; DEFER ALL for Priority Sage-grouse habitat

Jackson County

Colorado

BLM; CON: KFO

**PARCEL ID: 6838**

**Acres Nominated: 1833.281 Acres**

**Available Acres: 0 Acres**

**Deferred Portion: All 1833.281 Acres of Parcel ID:**

T.0090N., R.0800W., 6TH PM

Section 11: ALL; DEFER ALL for Priority Sage-grouse habitat

Section 12: ALL; DEFER ALL for Priority Sage-grouse habitat

Section 13: ALL; DEFER ALL for Priority Sage-grouse habitat

Section 13: EXCL COC09841; DEFER ALL for Priority Sage-grouse habitat

Jackson County

Colorado

BLM; CON: KFO

**PARCEL ID: 6829**

**Acres Nominated: 400.000 Acres**

**Available Acres: 0 Acres**

**Deferred Portion: All 400.000 Acres of Parcel ID:**

T.0090N., R.0800W., 6TH PM

Section 17: N2NE; DEFER ALL for Priority Sage-grouse habitat

Section 20: N2NW,SWNW; DEFER ALL for Priority Sage-grouse habitat

Section 21: E2E2,SWSE; DEFER ALL for Priority Sage-grouse habitat

Jackson County

Colorado

BLM; CON: KFO

**PARCEL ID: 6810**

**Acres Nominated: 1920.000 Acres**

**Available Acres: 0 Acres**

**Deferred Portion: All 1920.000 Acres of Parcel ID:**

T.0090N., R.0800W., 6TH PM

Section 22: ALL; DEFER ALL for Priority Sage-grouse habitat

Section 23: ALL; DEFER ALL for Priority Sage-grouse habitat

Section 27: ALL; DEFER ALL for Priority Sage-grouse habitat

Jackson County

Colorado

BLM; CON: KFO

**PARCEL ID: 6809**

**Acres Nominated: 2200.000 Acres**

**Available Acres: 0 Acres**

**Deferred Portion: All 2200.000 Acres of Parcel ID:**

T.0090N., R.0800W., 6TH PM

Section 28: NE,NENW,S2NW,S2; DEFER ALL for Priority Sage-grouse habitat

Section 32: N2NE,SENE,SWNW,SE; DEFER ALL for Priority Sage-grouse habitat

Section 33: ALL; DEFER ALL for Priority Sage-grouse habitat

Section 34: ALL; DEFER ALL for Priority Sage-grouse habitat

Jackson County

Colorado

PVT/BLM; CON: KFO

**PARCEL ID: 6826**

**Acres Nominated: 40.000 Acres**

**Available Acres: 0 Acres**

**Deferred Portion: All 40.000 Acres of Parcel ID:**

T.0100N., R.0800W., 6TH PM

Section 1: SWNE; DEFER ALL for Priority Sage-grouse habitat

Jackson County

Colorado

BLM; CON: KFO

**PARCEL ID: 6797**

**Acres Nominated: 1443.440 Acres**

**Available Acres: 0 Acres**

**Deferred Portion: All 1443.440 Acres of Parcel ID:**

T.0100N., R.0800W., 6TH PM

Section 4: SW; DEFER ALL for Priority Sage-grouse habitat

Section 5: Lot 1-4; DEFER ALL for Priority Sage-grouse habitat

Section 5: S2N2,S2; DEFER ALL for Priority Sage-grouse habitat  
Section 6: Lot 1-7; DEFER ALL for Priority Sage-grouse habitat  
Section 6: S2NE,SE,SW,SE; DEFER ALL for Priority Sage-grouse habitat

Jackson County  
Colorado

BLM; CON: KFO

**PARCEL ID: 6798**  
**Acres Nominated: 2555.200 Acres**  
**Available Acres: 0 Acres**  
**Deferred Portion: All 2555.200 Acres of Parcel ID:**

T.0100N., R.0800W., 6TH PM

Section 7: Lot 1-4; DEFER ALL for Priority Sage-grouse habitat  
Section 7: E2,E2W2; DEFER ALL for Priority Sage-grouse habitat  
Section 8: ALL; DEFER ALL for Priority Sage-grouse habitat  
Section 17: ALL; DEFER ALL for Priority Sage-grouse habitat  
Section 18: Lot 1-4; DEFER ALL for Priority Sage-grouse habitat  
Section 18: E2,E2W2; DEFER ALL for Priority Sage-grouse habitat

Jackson County  
Colorado

BLM; CON: KFO

**PARCEL ID: 6804**  
**Acres Nominated: 640.000 Acres**  
**Available Acres: 0 Acres**  
**Deferred Portion: All 640.000 Acres of Parcel ID:**

T.0100N., R.0800W., 6TH PM

Section 9: ALL; DEFER ALL for Priority Sage-grouse habitat

Jackson County  
Colorado

PVT/BLM; CON: KFO

**PARCEL ID: 6806**  
**Acres Nominated: 2360.000 Acres**  
**Available Acres: 0 Acres**  
**Deferred Portion: All 2360.000 Acres of Parcel ID:**

T.0100N., R.0800W., 6TH PM

Section 10: S2NW,SW,W2SE; DEFER ALL for Priority Sage-grouse habitat  
Section 15: W2E2,W2; DEFER ALL for Priority Sage-grouse habitat  
Section 21: ALL; DEFER ALL for Priority Sage-grouse habitat  
Section 22: W2E2,W2; DEFER ALL for Priority Sage-grouse habitat  
Section 27: W2NE,E2NW,NWNW,NESW; DEFER ALL for Priority Sage-grouse habitat



Section 28: NENW,W2W2; DEFER ALL for Priority Sage-grouse habitat

Jackson County  
Colorado

BLM; CON: KFO

**PARCEL ID: 6799**

**Acres Nominated: 2536.400 Acres**

**Available Acres: 0 Acres**

**Deferred Portion: All 2536.400 Acres of Parcel ID:**

T.0100N., R.0800W., 6TH PM

Section 19: Lot 1-4; DEFER ALL for Priority Sage-grouse habitat

Section 19: E2,E2W2; DEFER ALL for Priority Sage-grouse habitat

Section 20: ALL; DEFER ALL for Priority Sage-grouse habitat

Section 29: ALL; DEFER ALL for Priority Sage-grouse habitat

Section 30: Lot 1-4; DEFER ALL for Priority Sage-grouse habitat

Section 30: E2,E2W2; DEFER ALL for Priority Sage-grouse habitat

Jackson County  
Colorado

BLM; CON: KFO

**PARCEL ID: 6807**

**Acres Nominated: 1640.000 Acres**

**Available Acres: 0 Acres**

**Deferred Portion: All 1640.000 Acres of Parcel ID:**

T.0100N., R.0800W., 6TH PM

Section 23: S2SE; DEFER ALL for Priority Sage-grouse habitat

Section 24: S2SW; DEFER ALL for Priority Sage-grouse habitat

Section 25: W2NW,S2; DEFER ALL for Priority Sage-grouse habitat

Section 26: E2,E2SW,SWSW; DEFER ALL for Priority Sage-grouse habitat

Section 35: ALL; DEFER ALL for Priority Sage-grouse habitat

Jackson County  
Colorado

BLM; CON: KFO

**PARCEL ID: 6805**

**Acres Nominated: 1224.380 Acres**

**Available Acres: 0 Acres**

**Deferred Portion: All 1224.380 Acres of Parcel ID:**

T.0100N., R.0800W., 6TH PM

Section 31: Lot 1-4; DEFER ALL for Priority Sage-grouse habitat

Section 31: NE,E2NW; DEFER ALL for Priority Sage-grouse habitat

Section 32: ALL; DEFER ALL for Priority Sage-grouse habitat

Section 33: NENW,W2W2; DEFER ALL for Priority Sage-grouse habitat

Jackson County  
Colorado

BLM; CON: KFO

**PARCEL ID: 6828**

**Acres Nominated: 1370.680 Acres**

**Available Acres: 0 Acres**

**Deferred Portion: All 1370.680 Acres of Parcel ID:**

T.0110N., R.0800W., 6TH PM

Section 4: Lot 2-4; DEFER ALL for Priority Sage-grouse habitat

Section 4: S2; DEFER ALL for Priority Sage-grouse habitat

Section 5: Lot 2-4; DEFER ALL for Priority Sage-grouse habitat

Section 31: Lot 1-4; DEFER ALL for Priority Sage-grouse habitat

Section 31: E2,E2W2; DEFER ALL for Priority Sage-grouse habitat

Section 32: SW; DEFER ALL for Priority Sage-grouse habitat

Jackson County  
Colorado

PVT/BLM; CON: KFO

**PARCEL ID: 6795**

**Acres Nominated: 2066.490 Acres**

**Available Acres: 330.05 Acres**

**Deferred Portion: 1736.44 Acres of Parcel ID:**

T.0060N., R.0810W., 6TH PM

Section 1: Lot 4; DEFER ALL for Priority Sage-grouse habitat

Section 1: S2N2,N2S2,S2SW,SWSE; DEFER ALL for Priority Sage-grouse habitat

Section 2: SENE,E2SE; DEFER ALL for Priority Sage-grouse habitat

Section 3: Lot 1-3,5-6;

Section 3: Lot 7-8; DEFER ALL for Priority Sage-grouse habitat

Section 3: S2NE,SE; SENW;

Section 3: E2SW,SE; DEFER ALL for Priority Sage-grouse habitat

Section 10: NE,N2SE; DEFER ALL for Priority Sage-grouse habitat

Section 11: S2NE,N2SE; DEFER ALL for Priority Sage-grouse habitat

Section 12: SENE,NWNW,E2SE,SWSE; DEFER ALL for Priority Sage-grouse habitat

Section 13: NWNE,SESW; DEFER ALL for Priority Sage-grouse habitat

Section 15: Lot 1-3; DEFER ALL for Priority Sage-grouse habitat

Jackson County  
Colorado 320.000 Acres

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-09 to protect big game winter habitat:

T.0060N., R.0810W., 6TH PM

Section 1: Lot 4;  
Section 1: S2N2,SW,N2SE,SWSE;  
Section 2: SENE,E2SE;  
Section 3: Lot 1-3,5-8;  
Section 3: S2NE,SE,SW,E2SW,SE;  
Section 10: NE,N2SE;  
Section 11: S2NE,N2SE;  
Section 12: SENE,NWNW,NESE,S2SE;  
Section 13: NWNE;  
Section 15: Lot 1;

The following lands are subject to Exhibit CO-16 to protect greater sandhill crane nesting and staging habitat:

T.0060N., R.0810W., 6TH PM

Section 1: S2NE,E2SW,N2SE,SWSE;  
Section 10: SENE,NESE;  
Section 11: S2NE,N2SE;  
Section 12: SENE,NESE,S2SE;  
Section 13: NWNE;

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0060N., R.0810W., 6TH PM

Section 1: Lot 4;  
Section 1: SWNW,NWSW;  
Section 2: SENE,NESE;  
Section 3: SENW,SWNE,NWSE,S2SE;  
Section 10: NENE,SWNE,NWSE;  
Section 12: SENE,E2SE;  
Section 15: Lot 2,3;

The following lands are subject to Exhibit CO-10 to protect elk calving:

T.0060N., R.0810W., 6TH PM

Section 3: Lot 1-3;5-8;  
Section 3: S2NE,SE,SW,N2SE,SWSE;  
Section 15: Lot 1;

The following lands are subject to Exhibit CO-27 to protect steep slopes:

T.0060N., R.0810W., 6TH PM

Section 2: Lot 4;  
Section 3: Lot 1-3, 5-7;  
Section 3: NWSW;

BLM; CON: KFO

**PARCEL ID: 6791**

**Acres Nominated: 1639.080 Acres**

**Available Acres: 0 Acres**

**Deferred Portion: All 1639.080 Acres of Parcel ID:**

T.0060N., R.0810W., 6TH PM

Section 2: Lot 3-4; **DEFER ALL for Priority Sage-grouse habitat**

Section 2: S2NW,SW; DEFER ALL for Priority Sage-grouse habitat  
Section 10: NW,N2SW,SWSW; DEFER ALL for Priority Sage-grouse habitat  
Section 11: N2NE,W2,S2SE; DEFER ALL for Priority Sage-grouse habitat  
Section 13: NENW; DEFER ALL for Priority Sage-grouse habitat  
Section 14: S2NW,N2SW; DEFER ALL for Priority Sage-grouse habitat  
Section 15: S2NE,W2W2,NESW,N2SE; DEFER ALL for Priority Sage-grouse habitat

Jackson County  
Colorado

PVT/BLM; CON: KFO

**PARCEL ID: 6793**  
**Acres Nominated: 400.000 Acres**  
**Available Acres: 0 Acres**  
**Deferred Portion: All 400.000 Acres of Parcel ID:**

T.0070N., R.0810W., 6TH PM  
Section 25: E2,N2SW; DEFER ALL for Priority Sage-grouse habitat

Jackson County  
Colorado

PVT/BLM; CON: KFO

**PARCEL ID: 6794**  
**Acres Nominated: 720.000 Acres**  
**Available Acres: 0 Acres**  
**Deferred Portion: All 720.000 Acres of Parcel ID:**

T.0070N., R.0810W., 6TH PM  
Section 26: N2N2,SWNW,NWSW; DEFER ALL for Priority Sage-grouse habitat  
Section 35: S2N2,S2; DEFER ALL for Priority Sage-grouse habitat

Jackson County  
Colorado

PVT/BLM; CON: KFO

**PARCEL ID: 6800**  
**Acres Nominated: 840.000 Acres**  
**Available Acres: 0 Acres**  
**Deferred Portion: All 840.000 Acres of Parcel ID:**

T.0070N., R.0810W., 6TH PM  
Section 27: NWNW,S2NW,SW; DEFER ALL for Priority Sage-grouse habitat  
Section 28: E2,NW,N2SW; DEFER ALL for Priority Sage-grouse habitat

Jackson County  
Colorado

PVT/BLM; CON: KFO

**PARCEL ID: 6808**  
**Acres Nominated: 40.000 Acres**  
**Available Acres: 0 Acres**  
**Deferred Portion: All 40.000 Acres of Parcel ID:**

T.0070N., R.0810W., 6TH PM

Section 27: NENE; **DEFER ALL for Priority Sage-grouse habitat**

Jackson County  
Colorado

BLM; CON: KFO

**PARCEL ID: 6824**  
**Acres Nominated: 1752.440 Acres**  
**Available Acres: 1191.81 Acres**  
**Deferred Portion: 560.63 Acres of Parcel ID:**

T.0090N., R.0810W., 6TH PM

Section 2: Lot 11-13,16,17; **DEFER ALL for Priority Sage-grouse habitat**

Section 3: Lot 7,8,11-13,18; **DEFER ALL for Priority Sage-grouse habitat**

Section 3: Lot 9-10,14-17;

Section 4: Lot 1,2;

Section 4: S2NE,N2SE,SESE;

Section 9: E2E2;

Section 10: Lot 5,8-12; **DEFER ALL for Priority Sage-grouse habitat**

Section 10: Lot 6,7;

Section 10: W2W2;

Section 10: SESW; **DEFER ALL for Priority Sage-grouse habitat**

Section 11: Lot 6,7; **DEFER ALL for Priority Sage-grouse habitat**

Section 15: NW,N2SW;

Section 15: NWSE; **DEFER ALL for Priority Sage-grouse habitat**

Section 19: NWSE;

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0090N., R.0810W., 6TH PM

Section 2: Lot 11,12,16,17;

Section 3: Lot 12,13,15,18;

Section 4: Lot 2;

Section 4: S2NE,NESE;

Section 10: Lot 7,8;

Jackson County  
Colorado

BLM; CON: KFO

**PARCEL ID: 6801**  
**Acres Nominated: 966.050 Acres**  
**Available Acres: 845.080 Acres**  
**Deferred Portion: 120.970 Acres of Parcel ID:**

T.0090N., R.0810W., 6TH PM

Section 7: Lot 4;  
Section 18: Lot 1-4;  
Section 18: SWNE,SENE,E2SW,E2SE,SESE;  
Section 18: NESE; **DEFER ALL for Priority Sage-grouse habitat**  
Section 19: Lot 1-3;  
Section 19: Lot 4; **DEFER ALL for Priority Sage-grouse habitat**  
Section 19: N2NE,SWNE,E2NW,NESW;  
Section 20: NWNW; **DEFER ALL for Priority Sage-grouse habitat**

Jackson County

Colorado 966.050 Acres

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-09 to protect big game winter habitat:

T.0090N., R.0810W., 6TH PM

Section 7: Lot 4;  
Section 18: Lot 1-4;  
Section 18: SWNE,SENE,E2SW,SE;  
Section 19: Lot 1-3;  
Section 19: W2NE,E2NW;

The following lands are subject to Exhibit CO-10 to protect elk calving:

T.0090N., R.0810W., 6TH PM

Section 7: Lot 4;  
Section 18: Lot 1-4;  
Section 18: SWNE,SENE,E2SW,NWSE,S2SE;  
Section 19: Lot 1-4;  
Section 19: N2NE,SWNE,E2NW,NESW;

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0090N., R.0810W., 6TH PM

Section 7: Lot 4;  
Section 18: Lot 1, 3,4;  
Section 18: NWSE;  
Section 19: 1, 4;  
Section 19: NENW, NENE;  
Section 20: NWNW;

The following lands are subject to Exhibit CO-27 to protect steep slopes:

T.0090N., R.0810W., 6TH PM

Section 18: SENW;

The following lands are subject to Exhibit CO-30 to alert lessee of closure period for nesting grouse species:

T.0090N., R.0810W., 6TH PM

Section 19: Lot 3,4;  
Section 19: NESW;

PVT/BLM; CON: KFO

**PARCEL ID: 6802**

**Acres Nominated: 240.000 Acres**

**Available Acres: 40.000 Acres**

**Deferred Portion: 200.000 Acres of Parcel ID:**

T.0090N., R.0810W., 6TH PM

Section 27: E2SW, W2SE; DEFER ALL for Priority Sage-grouse habitat

Section 33: SESW; DEFER ALL for Priority Sage-grouse habitat

Section 33: SESE;

Jackson County

Colorado 40.000 Acres

All lands are subject to Exhibit CO-09 to protect big game winter habitat

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-10 to protect elk calving:

T.0090N., R.0810W., 6TH PM

Section 33: SESE;

The following lands are subject to Exhibit CO-03 to protect raptor nests:

T.0090N., R.0810W., 6TH PM

Section 33: SESE;

The following lands are subject to Exhibit CO-18 to protect raptor nesting and fledgling habitat:

T.0090N., R.0810W., 6TH PM

Section 33: SESE;

The following lands are subject to Exhibit CO-27 to protect steep slopes:

T.0090N., R.0810W., 6TH PM

Section 33: SESE;

PVT/BLM; CON: KFO

**PARCEL ID: 6803**

**Acres Nominated: 842.860 Acres**

**Available Acres: 0 Acres**

**Deferred Portion: All 842.860 Acres of Parcel ID:**

T.0090N., R.0810W., 6TH PM

Section 31: Lot 1-3; DEFER ALL for Priority Sage-grouse habitat

Section 31: NENE,S2NE,SENW,NESW,N2SE; DEFER ALL for Priority Sage-grouse habitat  
Section 32: W2NE,W2,NWSE; DEFER ALL for Priority Sage-grouse habitat

Jackson County  
Colorado

PVT/BLM; CON: KFO

**PARCEL ID: 6825**  
**Acres Nominated: 1200.000 Acres**  
**Available Acres: 160.000 Acres**  
**Deferred Portion: 1040.000 Acres**

T.0100N., R.0810W., 6TH PM

Section 9: E2,E2W2; DEFER ALL for Priority Sage-grouse habitat  
Section 10: W2; DEFER ALL for Priority Sage-grouse habitat  
Section 17: W2NE,E2NW,NESW; DEFER ALL for Priority Sage-grouse habitat  
Section 17: W2W2;  
Section 17: NWSE; DEFER ALL for Priority Sage-grouse habitat

Jackson County  
Colorado 160.000 Acres

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-09 to protect big game winter habitat:

T.0100N., R.0810W., 6TH PM

Section 9: E2,E2W2;  
Section 10: W2;  
Section 17: W2W2,SENW,NESW;

The following lands are subject to Exhibit CO-27 to protect steep slopes:

T.0100N., R.0810W., 6TH PM

Section 17: NWNW, SWSW;

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0100N., R.0810W., 6TH PM

Section 17: NW;

The following lands are subject to Exhibit CO-07 to protect waterfowl and shorebird habitat and rookeries:

T.0100N., R.0810W., 6TH PM

Section 17: W2NE,NW,N2SW,NWSE;

The following lands are subject to Exhibit CO-29 to alert lessee of Class I and II paleontological area inventory requirement:

T.0100N., R.0810W., 6TH PM



Section 17: W2NE,NW,NESW,W2SW,NWSE;

PVT/BLM; CON: KFO

**ATTACHMENT C:**

***Preferred Alternative Parcels with Stipulations for Lease***

***June 2014 - Colorado Competitive Oil & Gas Lease Sale***

**PARCEL ID: 6795**

T.0060N., R.0810W., 6TH PM

Section 3: Lot 1-3,5-6;  
Section 3: S2NE,SENW;

Jackson County  
Colorado 330.050 Acres

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

All lands are subject to Exhibit CO-09 to protect big game winter habitat

All lands are subject to Exhibit CO-10 to protect elk calving

The following lands are subject to Exhibit CO-27 to protect steep slopes:

T.0060N., R.0810W., 6TH PM  
Section 3: Lot 6;

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0060N., R.0810W., 6TH PM  
Section 3: SENW,SWNE;

The following lands are subject to Exhibit CO-10 to protect elk calving:

T.0060N., R.0810W., 6TH PM  
Section 3: Lot 1-3;5-8;  
Section 3: S2NE,SENW,E2SW,N2SE,SWSE;  
Section 15: Lot 1;

The following lands are subject to Exhibit CO-27 to protect steep slopes:

T.0060N., R.0810W., 6TH PM  
Section 2: Lot 4;  
Section 3: Lot 1-3, 5-7;  
Section 3: NWSW;

BLM; CON: KFO

**PARCEL ID: 6824**

T.0090N., R.0810W., 6TH PM

Section 3: Lot 9-10,14-17;  
Section 4: Lot 1,2;  
Section 4: S2NE,N2SE,SESE;  
Section 9: E2E2;  
Section 10: Lot 6,7;  
Section 10: W2W2;  
Section 15: NW,N2SW;  
Section 19: NWSE;

Jackson County  
Colorado 1191.810 Acres

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0090N., R.0810W., 6TH PM

Section 3: Lot,15;  
Section 4: Lot 2;  
Section 4: S2NE,NESE;  
Section 10: Lot 7;

The following lands are subject to Exhibit CO-09 to protect big game winter habitat:

T.0090N., R.0810W., 6TH PM

Section 3: 16;  
Section 4: Lot 2;  
Section 4: S2NE,N2SE,SESE;  
Section 9: E2E2;  
Section 10: Lot 6,7;  
Section 10: W2W2;  
Section 15: NW,N2SW;  
Section 19: NWSE;

The following lands are subject to Exhibit CO-10 to protect elk calving:

T.0090N., R.0810W., 6TH PM

Section 4: NWSE,SESE;  
Section 9: E2E2;  
Section 10: W2W2;  
Section 15: NW;  
Section 19: NWSE;

The following lands are subject to Exhibit CO-12 to protect Rocky Mountain bighorn sheep lambing.

T.0090N., R.0810W., 6TH PM

Section 4: NWSE,SESE, SWNE;  
Section 9: E2E2;  
Section 10: W2W2;  
Section 15: NW, N2SW;

The following lands are subject to Exhibit CO-17 protect white pelican nesting and feeding habitat during usage:

T.0090N., R.0810W., 6TH PM  
Section 3: Lot 9-10,14, 17;  
Section 10: Lot 6;;

The following lands are subject to Exhibit CO-18 to protect raptor nesting and fledgling habitat:

T.0090N., R.0810W., 6TH PM  
Section 4: SESE;  
Section 9: E2E2;  
Section 10: W2W2;  
Section 15: NW,N2SW;

The following lands are subject to Exhibit CO-29 to alert lessee of Class I and II paleontological area inventory requirement:

T.0090N., R.0810W., 6TH PM  
Section 4: Lot 1,2;  
Section 4: S2NE,N2SE,SESE;  
Section 9: E2NE;

The following lands are subject to Exhibit CO-03 to protect raptor nests:

T.0090N., R.0810W., 6TH PM  
Section 9: E2E2;  
Section 15: NW,N2SW;

The following lands are subject to Exhibit CO-04 to protect to protect bald eagle roosts and nests:

T.0090N., R.0810W., 6TH PM  
Section 3: Lot 9-10,14, 17;  
Section 10: Lot 6;

The following lands are subject to Exhibit CO-05 to protect peregrine falcon cliff nesting complex:

T.0090N., R.0810W., 6TH PM  
Section 9: E2E2;  
Section 15: NW,N2SW;

The following lands are subject to Exhibit CO-07 protect waterfowl and shorebird habitat and rookeries within significant production areas:

T.0090N., R.0810W., 6TH PM  
Section 3: Lot 9-10,14, 17;  
Section 10: Lot 6;;

The following lands are subject to Exhibit CO-23 to protect to protect bald eagle winter roost sites:

T.0090N., R.0810W., 6TH PM  
Section 3: Lot 9-10,14, 17;

Section 10: Lot 6;

The following lands are subject to Exhibit CO-24 to protect peregrine falcon cliff nesting complex:

T.0090N., R.0810W., 6TH PM

Section 9: E2E2;  
Section 10: W2W2;  
Section 15: NW,N2SW;

The following lands are subject to Exhibit CO-27 to protect steep slopes:

T.0090N., R.0810W., 6TH PM

Section 15: S2NW;

The following lands are subject to Exhibit CO-30 to alert lessee of closure period for nesting grouse species:

T.0090N., R.0810W., 6TH PM

Section 3: Lot 9-10,14-17;  
Section 4: Lot 1,2;  
Section 4: S2NE,N2SE,SESE;  
Section 10: Lot 6,7;  
Section 10: W2W2;  
Section 15: E2NW,NESW;  
Section 19: NWSE;

PVT/BLM; CON: KFO

**PARCEL ID: 6801**

T.0090N., R.0810W., 6TH PM

Section 7: Lot 4;  
Section 18: Lot 1-4;  
Section 18: SWNE,SENE,E2SW,W2SE,SESE;  
Section 19: Lot 1-3;  
Section 19: N2NE,SWNE,E2NW,NESW;

Jackson County

Colorado 845.080 Acres

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

All lands are subject to Exhibit CO-09 to protect big game winter habitat.

All lands are subject to Exhibit CO-10 to protect elk calving:

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0090N., R.0810W., 6TH PM

Section 7: Lot 4;  
Section 18: Lot 1, 3,4;  
Section 18: NWSE;

Section 19: 1;  
Section 19: NENW, NENE;

The following lands are subject to Exhibit CO-27 to protect steep slopes:

T.0090N., R.0810W., 6TH PM  
Section 18: SENW;

The following lands are subject to Exhibit CO-30 to alert lessee of closure period for nesting grouse species:

T.0090N., R.0810W., 6TH PM  
Section 18:SESE;  
Section 19: NENE, SWNE, NESW;

PVT/BLM; CON: KFO

**PARCEL ID: 6802**

T.0090N., R.0810W., 6TH PM  
Section 33: SESE;

Jackson County  
Colorado 40.000 Acres

All lands are subject to Exhibit CO-09 to protect big game winter habitat

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

All lands are subject to Exhibit CO-10 to protect elk calving:

All lands are subject to Exhibit CO-03 to protect raptor nests:

All lands are subject to Exhibit CO-18 to protect raptor nesting and fledgling habitat:

All lands are subject to Exhibit CO-27 to protect steep slopes:

PVT/BLM; CON: KFO

**PARCEL ID: 6825**

T.0100N., R.0810W., 6TH PM  
Section 17: W2W2;

Jackson County  
Colorado 160.000 Acres

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

The following lands are subject to Exhibit CO-27 to protect steep slopes:

T.0100N., R.0810W., 6TH PM

Section 17: NWNW, SWSW;

The following lands are subject to Exhibit CO-28 to protect riparian/wetland vegetation:

T.0100N., R.0810W., 6TH PM

Section 17: NW;

The following lands are subject to Exhibit CO-07 to protect waterfowl and shorebird habitat and rookeries:

T.0100N., R.0810W., 6TH PM

Section 17: W2NW, NWSW;

The following lands are subject to Exhibit CO-29 to alert lessee of Class I and II paleontological area inventory requirement:

T.0100N., R.0810W., 6TH PM

Section 17: W2NW, W2SW;

PVT/BLM; CON: KFO

**ATTACHMENT D:**

**STIPULATION EXHIBITS**

EXHIBIT CO-03

Lease Number: <LEASE\_NUMBER>

NO SURFACE OCCUPANCY STIPULATION

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-04

Lease Number: <LEASE\_NUMBER>

NO SURFACE OCCUPANCY STIPULATION

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 bald eagle roosts and nests within a one-quarter 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 to this stipulation depending on current usage, or on the geographical relationship to topographic barriers and vegetation screening.

EXHIBIT CO-05

Lease Number: <LEASE\_NUMBER>

NO SURFACE OCCUPANCY STIPULATION

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 peregrine falcon nesting within a one-quarter mile radius from the complex.

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.)

EXHIBIT CO-07

Lease Number: <LEASE\_NUMBER>

NO SURFACE OCCUPANCY STIPULATION

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 waterfowl and shorebird habitat and rookeries within significant production areas.

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.)

#### EXHIBIT CO-09

Lease Number: <LEASE\_NUMBER>

#### TIMING LIMITATION STIPULATION

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 Notices 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-10

Lease Number: <LEASE\_NUMBER>

#### TIMING LIMITATION STIPULATION

No surface use is allowed during the following time period(s). This stipulation does not apply to operation and maintenance of production facilities.

April 16 through June 30

On the lands described below:

<LEGAL\_DESCRIPTIONS>

For the purpose of (reasons):

To protect elk calving

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-12

Lease Number: <LEASE\_NUMBER>

#### TIMING LIMITATION STIPULATION

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 this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

#### EXHIBIT CO-17

Lease Number: <LEASE\_NUMBER>

## TIMING LIMITATION STIPULATION

No surface use is allowed during the following time period(s). This stipulation does not apply to operation and maintenance of production facilities.

March 16 through September 30

On the lands described below:

<LEGAL\_DESCRIPTIONS>

For the purpose of (reasons):

To protect white pelican nesting and feeding habitat during usage.

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.)

## EXHIBIT CO-18

Lease Number: <LEASE\_NUMBER>

## TIMING LIMITATION STIPULATION

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-23

Lease Number: <LEASE\_NUMBER>

TIMING LIMITATION STIPULATION

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-24

Lease Number: <LEASE\_NUMBER>

TIMING LIMITATION STIPULATION

No surface use is allowed during the following time period(s). This stipulation does not apply to operation and maintenance of production facilities.

March 16 through July 31

On the lands described below:

<LEGAL\_DESCRIPTIONS>

For the purpose of (reasons):

To protect peregrine falcon cliff nesting complex within one-half mile of 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:

Exceptions may be granted only 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-27

Lease Number: <LEASE\_NUMBER>

#### CONTROLLED SURFACE USE STIPULATION

Surface occupancy or use is subject to the following special operating constraints.

On the lands described below:

<LEGAL\_DESCRIPTIONS>

For the purpose of:

Protecting soils on surfaces greater than 40 percent slope. Prior to surface disturbance of steep (greater than 40 percent) an engineering/reclamation plan must be approved by the Authorized Officer. Such plans must demonstrate how the following will be accomplished:

- a. Site productivity will be restored.
- b. Surface runoff will be adequately controlled.
- c. Off-site areas will be protected from accelerated erosion such as drilling, gulying, piping, and mass wasting.
- d. Surface-disturbing activities will not be conducted during extended wet periods.
- e. Construction will not be allowed when soils are frozen.

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.)

#### EXHIBIT CO-28

Lease Number: <LEASE\_NUMBER>

#### CONTROLLED SURFACE USE STIPULATION

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.)

Exception Criteria:

Exceptions may be granted only if an on-site impact analysis shows no degradation of the resource values.

#### EXHIBIT CO-29

Lease Number: <LEASE\_NUMBER>

#### LEASE NOTICE

An inventory of fossil resources in Class I and II paleontological areas must be performed by an accredited paleontologist approved by the Authorized Officer.

On the lands described below:

<LEGAL\_DESCRIPTIONS>

EXHIBIT CO-30/GGNCA-15

Lease Number: <LEASE\_NUMBER>

In order to protect nesting grouse species, surface-disturbing activities proposed during the period between March 1 and June 30 will be relocated, consistent with lease rights granted and section 6 of standard lease terms, out of grouse nesting habitat.

Sage grouse nesting habitat is described as sage stands with sagebrush plants between 30 and 100 centimeters in height and a mean canopy cover between 15 and 40 percent.

On the lands described below:

<LEGAL\_DESCRIPTIONS>

EXHIBIT CO-34

Lease Number: <LEASE\_NUMBER>

ENDANGERED SPECIES ACT SECTION 7 CONSULTATION STIPULATION

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

Lease Number: <LEASE\_NUMBER>

### CONTROLLED SURFACE USE

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>

**ATTACHMENT E:**

**Response to Public Comments**

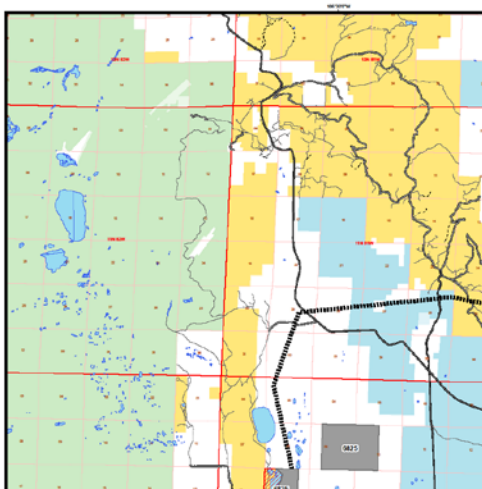
No.	Commenter	Comment	BLM's Response
1	Colorado Parks and Wildlife (CPW)	For Bighorn sheep production areas, CPW recommends a stipulation that restricts surface disturbance from <b>April 15 to June 30</b> in these affected parcels: Parcel 6824 (sections 4, 9, 10, 15)	<b>PARCEL ID: 6824</b> Exhibit CO-12 prohibits surface use from May 1 to July 15. The following lands are subject to Exhibit CO-12 to protect Rocky Mountain bighorn sheep lambing:  T.0090N., R.0810W., 6TH PM Section 4: NWSE,SESE, SWNE; Section 9: E2E2; Section 10: W2W2; Section 15: NW, N2SW;
2	Colorado Parks and Wildlife (CPW)	For Bighorn sheep migration areas, CPW recommends a limit of surface-density to one pad per section or consider off site mitigation actions: Parcel 6801 (section 18, N1/2) and 6803.	PARCEL ID: 6803: All deferred.
3	Colorado Parks and Wildlife (CPW)	For Pronghorn Antelope winter concentration areas, CPW recommends restricting surface use from <b>January 1 to March 31</b> . Parcel 6838 – (section 11, W 1/2).	PARCEL ID: 6838: All deferred.
4	Colorado Parks and Wildlife (CPW)	For Mule Deer critical winter range, CPW recommends two stipulations: a) Restrict surface use <b>December 1 to April 15</b> ; b) Surface density limit of one well pad per section or consider off-site mitigation. Parcel 6838 (section 11, W ½)	PARCEL ID: 6838: All Deferred
5	Colorado Parks and Wildlife (CPW)	For Greater Sage Grouse, CPW recommends a .6 mile buffer around Greater sage grouse leks.	All parcels listed are deferred.
6	Colorado Parks and Wildlife (CPW)	For Greater Sage Grouse production areas, CPW recommends a timing stipulation within 4 miles of lek sites of March 1 to June 30.	All but parcel 6795 and 6824 have been deferred. Parcel 6795 is not identified by CPW as nesting habitat and largely consists of aspen.  <b>PARCEL ID: 6824</b> The following lands are subject to Exhibit CO-30 to alert lessee of closure period (March 1 to June 30)

No.	Commenter	Comment	BLM's Response
			<p>for nesting grouse species:</p> <p>T.0090N., R.0810W., 6TH PM  Section 3: Lot 9-10,14-17;  Section 4: Lot 1,2;  Section 4: S2NE,N2SE,SESE;  Section 10: Lot 6,7;  Section 10: W2W2;  Section 15: E2NW,NESW;  Section 19: NWSE;</p>
7	Colorado Parks and Wildlife (CPW)	For Greater Sage Grouse core range, CPW recommends No Lease	All but parcel 6824 and 6825 have been deferred. Approximately 100 square meters are within the sage-grouse core range in parcel 6825. This area will be avoided using site specific relocation.
8	Colorado Parks and Wildlife (CPW)	For White-tailed Prairie dogs, CPW recommends pre-construction surveys for active colonies and a timing stipulation to avoid direct disturbance to active colonies from <b>March 1 through June 15.</b>	All but parcel 6795, 6824 and 6825 have been deferred. White-tailed prairie dog involvement with the proposed lease parcels is minor and is confined to small portions of parcels 6801, 6824, and 6825. Site specific mitigation measures developed at the APD stage including daily and seasonal activity restrictions and facility siting criteria would minimize or avoid adverse impacts to prairie dogs, particularly during the reproductive period.
9	Colorado Parks and Wildlife (CPW)	For moose priority habitat, CPW recommends timing restrictions on drilling of December 1 to April 15. Parcel 6824	<p><b>PARCEL ID: 6801</b>  The following lands are subject to Exhibit CO-09 (no surface use from December 1 to April 30) to protect big game winter habitat:</p> <p><u>T.0090N., R.0810W., 6TH PM</u>  Section 7: Lot 4;  Section 18: Lot 1-4;  Section 18:  SWNE,SENE,E2SW,E2SE,SESE;  Section 19: Lot 1-3;  Section 19: W2NE,E2NW;</p> <p><b>PARCEL ID: 6824</b>  All lands are subject to Exhibit CO-09 to protect big game winter habitat.</p>
10	Colorado Parks and Wildlife (CPW)	For parcel 6824 and 6840 within a State Wildlife Area, all parcels should have an NSO stipulation.	No parcel is within a State Wildlife Area. 6824 is adjacent to the Lake John State Wildlife Area.
11	Colorado Parks and Wildlife (CPW)	For elk production areas, CPW recommends a stipulation restricting surface use from <b>May 15 to June 30.</b>	PARCEL ID: 6800: All Deferred

No.	Commenter	Comment	BLM's Response
		Parcel 6800	
12	Colorado Parks and Wildlife (CPW)	CPW recommends that BLM defer all parcel in Greater Sage Grouse preliminary priority habitat.	All Parcels in preliminary priority habitat have been deferred.
13	Colorado Parks and Wildlife (CPW)	CPW recommends that construction and drilling activities be completed prior to the start of big game season. Parcel 6792	PARCEL ID: 6792: All Deferred
14	Rocky Mountain Wild	Leasing large acreage of important sage-grouse habitat, prior to the completion of regional conservation planning efforts, will push the species closer to a full listing and must therefore be avoided.	All lease parcels brought forward in the Preferred Alternative (see Attachment C) are outside of the preliminary priority sage grouse habitat. If development is proposed in these areas, a thorough environmental analysis will be completed prior to any surface disturbing activities to determine potential impacts associated with the project. If Greater sage-grouse are found near the project area, impacts will be mitigated by either relocating the action or by applying conditions of approval.
15	Rocky Mountain Wild	Parcel 6824 is within a bald eagle winter forage area.	<p>No nests have been recorded in or near the proposed leases. Bald eagle winter foraging is dispersed and opportunistic across the entire KFO area. Surface disturbing activities that have potential to disrupt important bald eagle seasonal use activities are subject to NSO and TL stipulations. These stipulations have been successful in protecting ongoing nest efforts and maintaining the long-term utility of roost and nest sites in the KFO.</p> <p><b>PARCEL ID: 6824</b> The following lands are subject to Exhibit CO-04 and CO-24 to protect to protect bald eagle roosts and nests:</p> <p><u>T.0090N., R.0810W., 6TH PM</u> Section 3: Lot 9-10,14, 17; Section 10: Lot 6;</p>
16	Rocky Mountain Wild	Parcels 6802 and 6824 are within Colorado State Wildlife Areas	Parcels are not in Colorado State Wildlife areas but may be adjacent to them.

***ATTACHMENT F:***

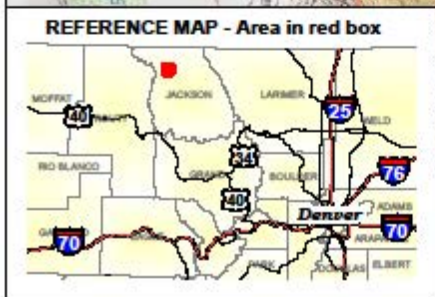
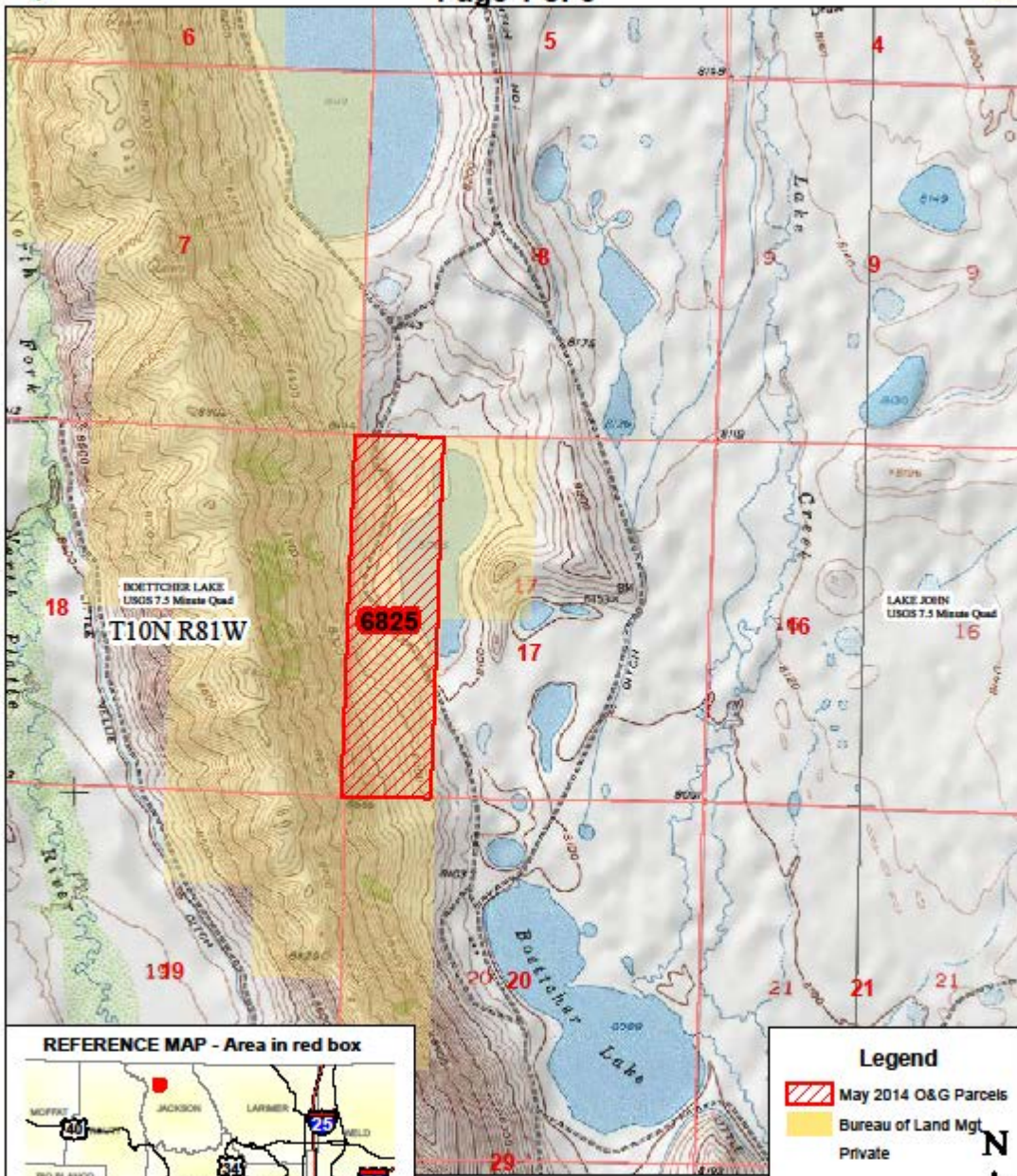
***Maps***





# May 2014 Oil and Gas Lease Sale Parcels Map Book

Page 1 of 5



**Legend**

- May 2014 O&G Parcels
- Bureau of Land Mgt.
- Private

**N**

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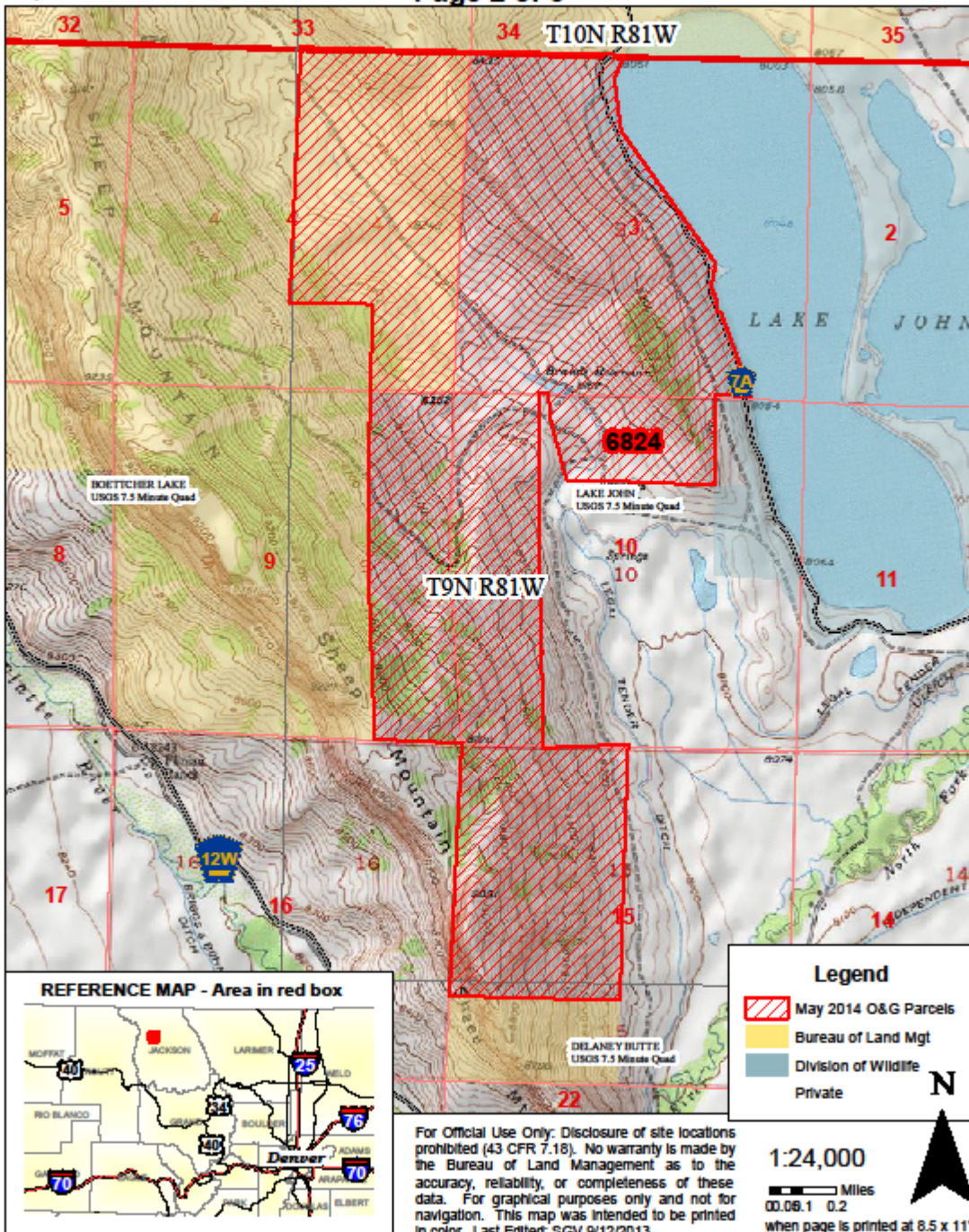
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May 2014 Oil and Gas Lease Sale Parcels Map Book  
Page 2 of 5

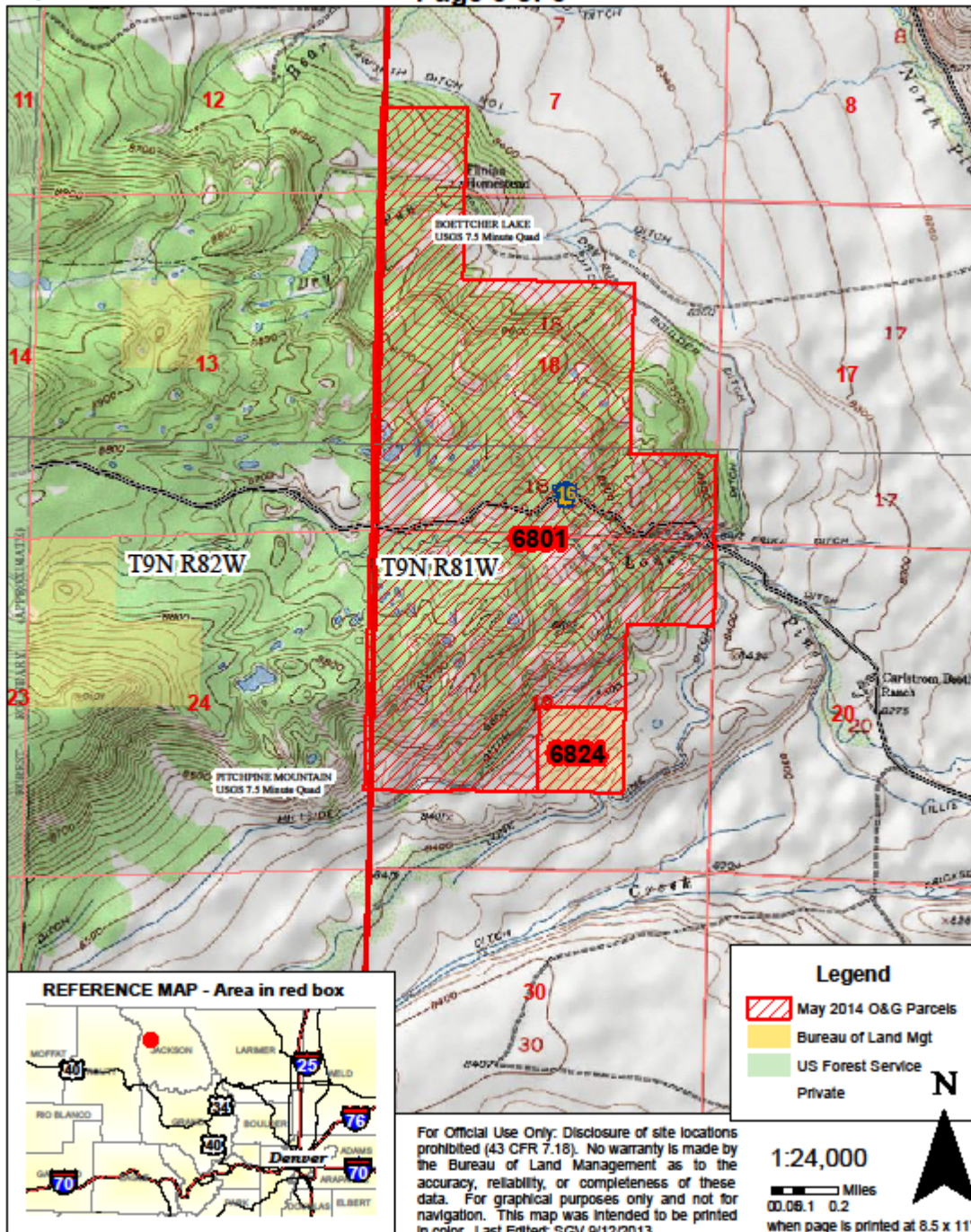






# May 2014 Oil and Gas Lease Sale Parcels Map Book

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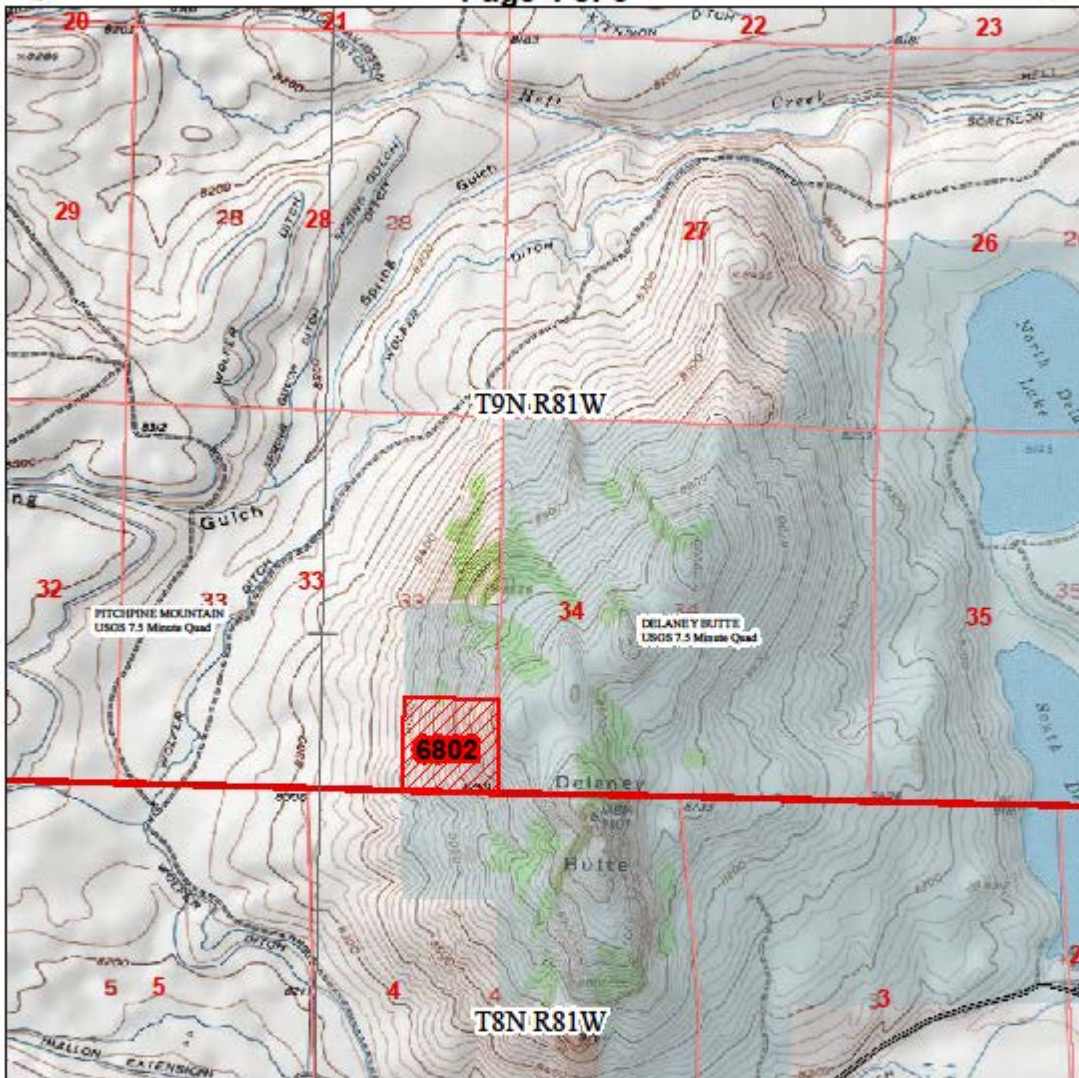




# May 2014 Oil and Gas Lease Sale Parcels Map Book



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**Legend**

- May 2014 O&G Parcels
- Division of Wildlife
- Private

**N**

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May 2014 Oil and Gas Lease Sale Parcels Map Book  
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