United States Department of the Interior Bureau of Land Management

Environmental Assessment for the February 2013 Oil and Gas Lease Sale

Royal Gorge Field Office, Cañon City, Colorado 81212

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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 and the Federal Land Policy and

Management Act of 1976, 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 45 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; if appropriate stipulations have been included; if new information has become available which might change any analysis conducted during the planning process; if appropriate consultations have been conducted, and if there are special resource conditions of which potential bidders should be made aware. Once the draft parcel review is completed and returned to the State Office, a list of available lease parcels and 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. On rare occasions, additional information obtained after the publication of the NCLS may result in withdrawal of certain parcels prior to the day of the lease sale.

The inclusion of a parcel listed in the lease sale notice may be protested. A protest must be received at the BLM's Colorado State Office no later than close of business on the 30th calendar day after the posting of the notice of the lease sale. Nominated parcels that receive no bids during the February lease sale become available for noncompetitive sale beginning the day after the lease sale. Parcels offered noncompetitively remain available on a first-come, first-served basis for a two-year period beginning the day after the sale.

One-hundred-fifty-five (155) parcels comprising 74,160 acres within the Royal Gorge Field Office (RGFO) were nominated for the February lease sale (see Attachment A for complete legal descriptions). This figure is comprised of 2032 acres of federal surface estate managed by BLM or other federal agencies and 72,127 acres of split-estate land (privately and State of Colorado owned surface over federally owned mineral estate.

Colorado Bureau of Land Management (BLM) Instruction Memorandum No. CO-2010-027 provided guidance and direction for implementing Washington Office (WO) IM 2010-117, Oil and Gas Leasing Reform-Land Use Planning and Parcel Review. That IM requires the field office to complete site-specific NEPA compliance documentation and provide a 30 day public review and comment period for lease sale NEPA documents. It also provides guidance for parcel review, timeframes, leasing

recommendations and attachments to be included with the NEPA documents as well as guidance for use of Master Leasing Plans. This EA has been prepared in accordance with IM CO-2010-027 by the BLM RGFO to analyze leasing of 155 parcels nominated.

1.2 PROJECT LOCATION AND LEGAL DESCRIPTION

LEGAL DESCRIPTION: Please see Attachments A, B, C. E and Map 1 Below.

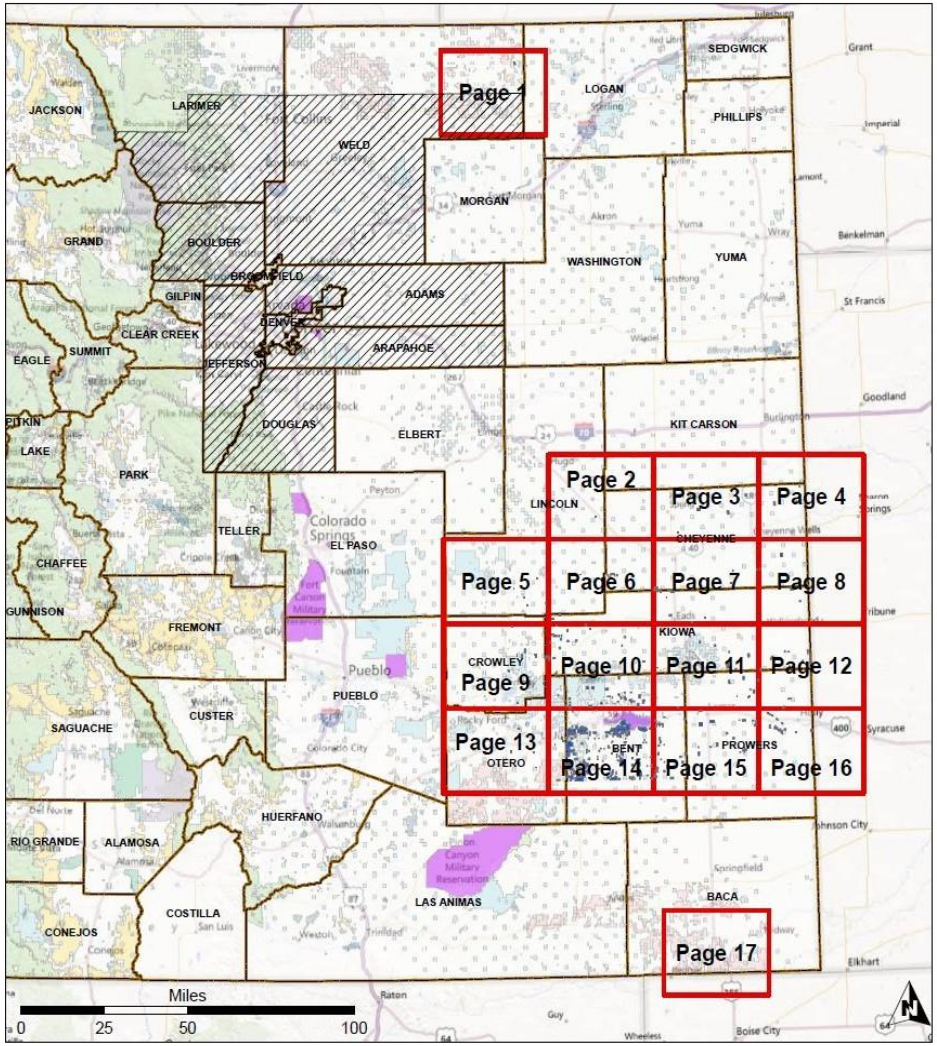
PROJECT NAME: February 2013 Oil and Gas Lease Sale

PLANNING UNIT: Royal Gorge Field Office

Map 1. Parcel overview map, February 2013 oil and gas lease sale, Bureau of Land Management-Royal Gorge Field Office, 2012.

February 2013
Oil and Gas Lease Parcels

DOI-BLM-CO-200-2012-0060 EA_O&G



Legend

- Bureau of Land Management
- Bureau of Reclamation
- Indian Reservation
- Military Reservation
- National Grasslands
- National Park Service
- Other Federal
- Private
- State
- State, County, City; Areas
- Bankhead-Jones Land Use Lands
- US Fish and Wildlife Service
- US Forest Service
- Map Book Pages
- Available Parcels
- Ozone NonAttainment
- County Boundaries

Map Created By:
G. Torres November 15, 2012

1.3 PURPOSE AND NEED

The purpose of the proposed action is to respond to the nomination of parcels for competitive oil and gas leasing and to allow private individuals or companies to explore for and develop federal oil and gas resources for sale on public markets.

The need for the action is to satisfy the conditions of the Mineral Leasing Act of 1920 and the Federal Land Policy and Management Act of 1976. The sale of oil and gas leases is needed to meet the growing energy needs of the United States public (43 U.S.C. § 1702 (c)).

1.4 PLAN CONFORMANCE REVIEW

PLAN CONFORMANCE REVIEW:

Name of Plan: Royal Gorge Resource Management Plan

Date Approved: May 13, 1996

Decision Number: 10-27

Decision Language: The BLM administered mineral estate will be open to fluid minerals leasing, exploration and production, subject to the lease terms and applicable lease stipulations.

Name of Plan: Northeast Resource Management Plan

Date Approved: September, 1986 as amended November 1991

Decision Number: Oil and Gas element amendment to the RMP

Decision Language: 672,000 acres of BLM administered mineral estate within the Northeast Planning Area are open to oil and gas leasing and development, subject to the lease terms and (as applicable) lease stipulations.

The Royal Gorge and Northeast RMPs identified areas open for oil and gas leasing, and specified stipulations that would apply to leases. The proposed lease sales are within the areas identified as open to leasing. Based on the RMPs, specific stipulations are attached to each lease parcel.

In January 1997, the Colorado State Office of the BLM approved the Standards for Public Land Health and amended all RMPs in the State. Standards describe the conditions needed to sustain public land

health and apply to all uses of public lands.

Standard 1: Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, land form, and geologic processes.

Standard 2: Riparian systems associated with both running and standing water function properly and have the ability to recover from major disturbance such as fire, severe grazing, or 100-year floods.

Standard 3: Healthy, productive plant and animal communities of native and other desirable species are maintained at viable population levels commensurate with the species and habitat's potential.

Standard 4: Special status, threatened and endangered species (federal and state), and other plants and animals officially designated by the BLM, and their habitats are maintained or enhanced by sustaining healthy, native plant and animal communities.

Standard 5: The water quality of all water bodies, including ground water where applicable, located on or influenced by BLM lands will achieve or exceed the Water Quality Standards established by the State of Colorado.

Because standards exist for each of these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in Chapter 3 of this document.

1.5 SCOPING AND ISSUES IDENTIFIED

1.5.1 Scoping: NEPA regulations allow the BLM to use a scoping process to identify potential significant issues in preparation for impact analysis. The principal goals of scoping are to allow public participation and to identify issues, concerns, and potential impacts that require detailed analysis. The public scoping period for the February 2013 Oil and Gas Lease Sale lasted from June 11, 2012 to June 25, 2012.

Internal Scoping

The following table is provided as a mechanism for resource staff review, to identify those resource values with issues or potential impacts from the proposed action and/or alternatives. Those resources identified in the table as potentially impacted will be brought forward for analysis.

Impact Types: NP = Not Present; NI = Present but Not Impacted; PI = Present and Potentially Impacted

Resource	Impact Type	Date Reviewed	Initials	Review Comment
Air Quality *Chad Meister*	PI	7/16/2012	MdC	See affected environment

Resource	Impact Type	Date Reviewed	Initials	Review Comment
Geology/Minerals *Melissa Smeins*	PI	7/12/2012	MJS	See affected environment
Soils *John Smeins*	PI	7/19/2012	JS	See Analysis
Water Quality Surface and Ground *John Smeins*	PI	7/19/2012	JS	See Analysis
Invasive Plants *John Lamman*	PI	06/23/2012	JL	See Analysis
T&E and Sensitive Species *Matt Rustand*	PI	7/27/2012	MR	No federally listed species has the potential to be directly influenced by development of the proposed leases based on existing data from the BLM, CNHP and CDOW. The lesser prairie chicken (LPC) (proposed threatened species) and the mountain plover, black-tailed prairie dog, swift fox, Townsend's big eared bat, common kingsnake, milk snake, massasauga, American white pelican, northern goshawk, ferruginous hawk and bald eagle (BLM sensitive species) could potentially occur on parcels up for leasing.
Vegetation *Chris Cloninger, John Lamman*	PI	06/23/2012	JL	See Analysis
Wetlands and Riparian *Dave Gilbert*	PI	6/20/2012	DG	Wetlands and riparian resources occur in various areas of eastern Colorado and South Park including some areas upon various lease parcels listed in this EA.
Wildlife Aquatic *Dave Gilbert*	PI	6/20/2012	DG	Aquatic habitat is present on some parcels either associated with wetland or riparian resources, or as temporary ponds behind earthen dams, or in intermittent seasonal playa habitats.
Wildlife Terrestrial *Matt Rustand*	PI	7/27/2012	MR	Future development of leases could impact terrestrial wildlife and raptors.
Migratory Birds *Matt Rustand*	PI	3/13/2012	MR	Several habitat types for migratory birds are found within the area covered by this EA. While the act of leasing will have no impact, future development will impact migratory birds
Cultural Resources *Monica Weimer, Erin Watkins*	PI	7/11/12	MMW	See Analysis
Native American Religious Concerns *Monica Weimer, Erin Watkins*	NP	4/9/2012	MMW	A consultation with potentially interested Native American tribes has been completed, and no concerns were identified. The BLM contacted the following tribes: Apache Tribe of Oklahoma, Cheyenne and Arapaho Tribes of Oklahoma, Cheyenne River Sioux

Resource	Impact Type	Date Reviewed	Initials	Review Comment
				Tribe, Comanche Tribe of Oklahoma, Crow Creek Sioux, Eastern Shoshone, Jicarilla Apache Nation, Kiowa Tribe of Oklahoma, Northern Arapaho Tribe, Northern Cheyenne Tribe, the Ute Tribe, Oglala Sioux Tribe, Rosebud Sioux Tribe, Southern Ute Tribe, Standing Rock Lakota Tribe, and the Ute Mountain Ute Tribe..
Socioeconomics *David Epstein*	PI	4/16/12	DE	The proposed action affects areas that are rural in nature. The land adjacent to these parcels is comprised variously of farmland, rural subdivisions and open rangeland.
Paleontology *Melissa Smeins,*	PI	7/12/2012	MJS	See Analysis
Visual Resources *Kalem Lenard*	PI	6/21/2012	KL	See Analysis
Environmental Justice *David Epstein*	NP	4/16/12	mw	The proposed action affects areas that are rural in nature. The land adjacent to these parcels is farmland and open rangeland. There are no minority or low-income populations in or near the project area. As such, the proposal will not have a disproportionately high and adverse human health or environmental effect on minority or low-income populations.
Wastes Hazardous or Solid *Stephanie Carter*	PI	4/18/2012	SSC	See Analysis
Recreation *Kalem Lenard*	PI	6/21/2012	KL	See Analysis
Farmlands Prime and Unique *John Lamman*	NI	06/23/2012	JL	Prime and or Unique Farmlands are located within the project area. Details of any required mitigation will be listed in a site specific APD.
Lands and Realty *Debbie Bellew*	NI	3/20/2012	DB	The majority of the parcels are located on private surface. The parcels located on public surface will have no impact associated with the leasing for oil and gas development. Leasing does not authorize any development or use of the surface of the leased lands without further application and approval by the BLM.
Wilderness, WSAs, ACECs, Wild & Scenic Rivers *Kalem Lenard*	NP	6/21/2012	KL	
Wilderness Characteristics *Kalem Lenard*	NP	6/21/2012	KL	

Resource	Impact Type	Date Reviewed	Initials	Review Comment
Range Management *John Lamman*	PI	06/23/2012	JL	See Analysis
Forest Management *Ken Reed*	NP	3/13/2012	KR	No impacts to forests or forest management activities.
Cadastral Survey *Tony Mule´*	NP	7/10/12	AM	Leasing does not authorize any development or use of the surface of the leased lands without further application and approval by the BLM. Currently analyzed when ADP is received.
Noise *Martin Weimer*	PI	4/16/12	mw	See Analysis
Fire *Bob Hurley*	NP	3/14/2012	BH	The proposed action will not create or elevate risk factors leading to unwanted wildland fire ignition.
Law Enforcement *Steve Cunningham*	NP	4/16/12	mw for SC	There are no law enforcement issues associated with this action.

The affected resources brought forward for analysis include:
Air Quality
Geology/Minerals
Soils
Water Quality
Invasive Plants
T&E and Sensitive Species
Vegetation
Wetland and Riparian
Wildlife Aquatic
Wildlife Terrestrial
Migratory Birds
Cultural Resources
Socio-Economic
Paleontology
Visual Resources
Waste Hazardous or Solid
Noise
Recreation
Range Management

Initial public scoping took place by posting the project summary with parcel maps on the NEPA register

on the Royal Gorge Field Office NEPA website and by mailing courtesy notices to affected land owners, governments, and special interest groups. Several individuals emailed or called with questions regarding the nominated parcels and/or the process of leasing. Twelve individuals/special interest groups provided specific comments during the public scoping period. These comments are addressed in the EA.

Significant portions of public, private and state lands within the Park County were included in the South Park National Heritage Area through the Omnibus Public Lands Management Act of 2009, Public Law 111-11, March 30, 2009. In general, the Act recognizes the significance of the area's resources and distinctive history. Title VIII, Subtitle A, Section 8003 (e) (2) (3) of the Act describes the South Park National Heritage Area's relationship to other federal agencies and Section 8003 (f) (3) addresses regulatory protections. Specifically:

> CONSULTATION AND COORDINATION.—The head of any Federal agency planning to conduct activities that may have an impact on the Heritage Area is encouraged to consult and coordinate the activities with the Secretary and the management entity to the maximum extent practicable. (Section 8003(e)(2))
>
> OTHER FEDERAL AGENCIES.—Nothing in this section—
>
> (A) modifies, alters, or amends any law or regulation authorizing a Federal agency to manage Federal land under the jurisdiction of the Federal agency;
> (B) limits the discretion of a Federal land manager to implement an approved land use plan within the boundaries of the Heritage Area; or
> (C) modifies, alters, or amends any authorized use of Federal land under the jurisdiction of a Federal agency. (Section 8003(e)(3))
>
> PRIVATE PROPERTY AND REGULATORY PROTECTIONS.—
> Nothing in this section…alters any duly adopted land use regulation, approved land use plan, or other regulatory authority of any Federal, State or local agency, or conveys any land use or other regulatory authority to the management entity. (Section 8003(f)(3)

Furthermore, consultation with Linda Balough, Executive Director of the South Park National Heritage Area in January 2010 indicated that resource use was actually a part of the area's unique heritage and that the intent of the Act was to highlight the heritage of the area as well as its natural resources. Ms. Balough also noted that the county already had other designations in place (such as a Preserve America Community) with the National Heritage Area Designation. Discussions with Ms. Balough also identified the fact that any possible conflicts between oil and gas development and resource values mentioned in the National Heritage Area feasibility study would most likely involve cultural or scenic values. At this time, the proposed action only authorizes leasing the attached parcels and does not authorize any development or use of the surface of lease lands, without further application and approval by the BLM.

Any site specific concerns related to cultural or visual (or other) values are typically identified and addressed during the NEPA process if, and when, any land disturbing activities (such as APDs) are being considered. Ms. Balough is aware and noted that a Section 106 process is required if, and when, any land disturbing activities (such as APDs) are being considered.

1.5.2 Public Comment Period:

The preliminary EA and unsigned Finding of No Significant Impact (FONSI) were posted to our website and announced by press release for a 30 day comment period starting August 17, 2012. Letters were also mailed to affected private land surface owners whose land overlies federal minerals proposed for leasing.

The BLM received over 2,500 public comments concerning this lease sale. The greatest majority of these comments were 'form letter' emails submitted by individuals through the Sierra Club. The most substantive comments were submitted by various State and local governments, and local environmental interest groups. An unincorporated residential subdivision which could be impacted by the potential drilling also generated numerous public comments. Attachment F is a summary of the topics presented by the comments and responses to substantive comments.

1.6 DECISION TO BE MADE

The BLM Royal Gorge Field Office (RGFO) will make a recommendation to the BLM State Director which parcels to offer for sale in the November 2012 competitive lease sale based on the analysis contained in this EA. The BLM may choose to: a) offer all of the nominated parcels for sale, b) offer a subset of the parcels for sale, or c) not offer any parcels at this time. The finding associated with this EA is not the final approval for the proposed action. The final decision on which parcels will be leased will be made by the BLM State Director.

CHAPTER 2 - PROPOSED ACTION AND ALTERNATIVES

2.1 INTRODUCTION

The purpose of this chapter is to provide information on the Proposed Action and Alternatives. Alternatives considered but not analyzed in detail are also discussed.

2.2 ALTERNATIVES ANALYZED IN DETAIL

2.2.1 Proposed Action

The Proposed Action is to lease Federal mineral estate from lands reviewed and found suitable for leasing in the RGFO through the Royal Gorge Resource Management Plan and the Northeast Resource

Management Plan (as amended). The current lease sale includes 155 parcels in Baca, Bent, Cheyenne, Crowley, Kiowa, Lincoln, Otero, Park, Prowers, and Weld Counties. Those lands proposed for lease total 74,160 acres of federal mineral estate and are described in Attachment A, minus parcels 6289, 6482, 6454, that portion of parcel 6355 that is within Granada Relocation Center (Amache) National Historic Landmark, and that portion of parcel 6481 that is administered by the US Forest Service. Of those total federal mineral estate acres approximately 2,032 surface acres are BLM public land. The lands have been grouped into appropriate lease parcels for purposes of offering lands via competitive lease sale as oil and gas leases. Offered lease parcels are grouped according to regulatory requirements as prescribed in the 43 CFR 3100 regulations, setting parameters for acreage limitations, public lands, acquired lands, and excepted acreage. Regulations also set certain lease terms and conditions under which development of the surface of oil and gas leases may occur. Stipulations for other surface protection will be applied, as consistent with BLM land-use plans, where legislated and/or regulatory lease terms and conditions are not adequate to protect those resources. These stipulations are described in the planning documents and will be attached as stipulations to any of the parcels that are leased in areas where the stipulations apply.

If the parcels are not leased at the proposed lease sales, 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 does not get leased after an initial offering, and is not leased within a two year period, must go through a new review and competitive lease sale process prior to being leased.

The act of leasing does not authorize any development or use of the surface of lease lands, without further application and BLM approval. The BLM may, in the future, receive Applications for Permit to Drill (APDs) for those parcels that are leased. BLM would prepare additional site-specific NEPA analysis at that time.

<u>Justification for deferrals:</u> The deferral process for nominated parcels addresses situations in which further analysis of the suitability to leasing a parcel is needed. The deferral process does not necessarily withdraw a parcel from all future leasing, but merely indicates that further analysis of the parcel is needed before it may possibly be reintroduced in a future lease sale. The following parcels are recommended for deferral in the proposed action for the February 2013 lease sale.

Parcel 6454: This parcel is entirely situated in Weld County, and located within the Denver Metro/North Front Range 8-hour Ozone Non-attainment Area. Under the proposed action this parcel is being deferred pending additional air quality impacts analysis, consistent with a settlement agreement between the BLM and Wild Earth Guardians.

Parcel 6289: This parcel is situated in Kiowa County and within the Sand Creek National Historic Site. Under the proposed action this parcel is being dropped from further consideration.

Parcel 6482: This parcel is situated in Baca County and is administered by the US Forest Service. Under the proposed action this parcel is being sent to the US Forest Service for their consideration.

Parcel 6481: This parcel is situated in Baca County and a portion (22.8 acres) is administered by the US Forest Service. Under the proposed action that portion that is administered by the US Forest Service is being sent to the US Forest Service for their consideration.

Parcel 6355: This parcel is situated in Powers County with an approximately 160 acre portion within the Granada National Historic Site. Under the proposed action that 160 acre portion within the Granada National Historic Site is being dropped from further consideration.

2.2.2 Description of Preferred Alternative

The BLM preferred alternative proposes to offer for sale the 146 parcels identified in Attachment C with appropriate stipulations and lease notices identified in Exhibit D. The preferred alternative differs from the proposed action by analyzing the deferral of the six parcels in Park County as a result of inter-related and overlapping resources identified from additional internal and public review. These resources include, in part:

1. Water Resources;
2. State of Colorado State Parks and Wildlife Areas;
3. Critical Wildlife Habitat;
4. Recreation and Tourism;
5. Visual Resources,

The six additional deferral parcels identified in the preferred alternative include 6484, 6485, 6486, 6487, 6488 and 6489 all within Park County. These six additional deferral parcels total 2,849 acres. These deferrals are in addition to the deferral parcels identified in the proposed action - 6289, 6482, 6454, that portion of parcel 6355 that is within Granada Relocation Center (Amache) National Historic Landmark, and that portion of parcel 6481 that is administered by the US Forest Service. The resulting lands offered for lease sale total 70,289 acres.

2.2.3 No Action Alternative

The BLM NEPA Handbook (H-1790-1) states that for EAs on externally initiated proposed actions, the No Action Alternative generally means that the proposed action would not take place. In the case of a lease sale, this would mean that an expression of interest to lease (parcel nomination) would be denied or rejected.

The No Action Alternative would withdraw the lease parcels from the February 2013 lease sale. The

parcels would remain available 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.

No mitigation measures would be required as no new oil and gas development would occur on the unleased lands. No rental or royalty payments would be made to the Federal government.

Attachment A of this document lists all pre EA parcels proposed for lease. Attachment B parcels are those proposed to be deferred or with deferred portions under the preferred alternative and Attachment C are those parcels that would be available for lease with applied stipulations under the preferred alternative. Definitions of applied stipulations can be found in Attachment D and maps of the parcels are found in Attachment E.

2.3 ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL

An alternative considered but eliminated involved the lease of all nominated parcels as provided in Attachment A, with no deferrals. This alternative was dropped from further consideration because BLM identified the need for deferral of parcels including;

- Parcel 6454 in order to allow for further analysis of air quality issues and/or concerns on this parcel. Parcel 6454 is in Weld County and located within the 8-hour ozone non-attainment area.
- Parcel 6289 was dropped from further consideration because it is within the Sand Creek National Historic Site which was withdrawn from mineral leasing. The portion of parcel 6355 (160 acres) within the Camp Amache National Historic site was also dropped from further consideration. That portion of parcel 6355 (400 acres) outside the Historic Site is further analyzed for inclusion in the February lease sale.
- All of parcel 6482 and a portion (22.8 acres) of parcel 6481 lie within lands managed by the USDA Forest Service. Those parcels have been submitted to the Forest Service for analysis and consent to lease. The portion of parcel 6481 that lies outside of Forest Service managed land is analyzed for inclusion in the forthcoming sale.

CHAPTER 3 - AFFECTED ENVIRONMENT AND EFFECTS

3.1 INTRODUCTION

This section provides a description of the human and natural environmental resources that could be affected by the Proposed Action and presents comparative analyses of the direct, indirect and cumulative effects on the affected environment stemming from the implementation of the actions under the Proposed Action and other alternatives analyzed.

This EA draws upon information compiled in the Royal Gorge and Northeast Resource Area RMPs (BLM 1996 1991).

3.1.1 Resources Not Affected

The following resources, identified as not being present or not affected will not be brought forward for additional analysis:

Special Designations – there are no Special Designations in the affected area.

Wilderness, Wild and Scenic Rivers and Wilderness Characteristics – There are no designated wilderness areas or wild and scenic rivers, wilderness study areas, or lands with wilderness characteristics in the area affected by the alternatives analyzed in detail.

Lands and Realty – The majority of the parcels are located on private surface. The parcels located on public surface will have no impact associated with the leasing for oil and gas development. Leasing does not authorize any development or use of the surface of the leased lands without further application and BLM approval.

Forest Management – Leasing will have no impact to forests or forest management activities.

Wild Horses– there are no herd management areas in the area affected by the alternatives analyzed in detail

Fire – The proposed action will not create or elevate risk factors leading to unwanted wildland fire ignition.

Law Enforcement – There are no law enforcement issues associated with this action.

3.1.2 Past, Present, Reasonably Foreseeable Actions

NEPA requires federal agencies to consider the cumulative effects of proposals under their review. Cumulative impacts is 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 actions regardless of what agency…or person undertakes such other actions." The CEQ states 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" or more simply put, the area that might be affected by the proposed action.

To assess past, present and reasonably foreseeable actions that may occur within the affected area a review of RGFO NEPA log and field office GIS data was completed. For the Royal Gorge Field Office relatively very few well development activities have occurred on BLM administered surface when compared to privately owned surface.

The potential exists for future oil and gas development throughout the Royal Gorge Field Office. Historically, within the area of the RGFO, encompassing the eastern half of Colorado, the vast majority of oil and gas activity has occurred and is occurring on private surface and private minerals, where the BLM has no management authority. This is followed by that activity on private surface with underlying federal minerals (split estate) and last by federal surface/federal minerals. The following table showing the numbers of currently producing wells documented by the Colorado Oil and Gas Conservation Commission as of January 2012 for each of the ten counties involved in the sale. The largest percentage of the wells is located on private surface/private minerals but impacts from this private development must also be evaluated when considering cumulative impacts to the environment.

County	Baca	Bent	Cheyenne	Crowley	Kiowa	Lincoln	Otero	Park	Powers	Weld
Producing Wells	171	31	370	0	101	71	0	1	27	21,972

For public lands, the BLM has records of past projects as well as oil and gas activities that allows for a more thorough assessment of cumulative impacts. The cumulative impacts assessment for development that has occurred on private surface is more problematic since the BLM generally has no knowledge or records of activities, other than oil and gas development, on the private land.

3.2 PHYSICAL RESOURCES

3.2.1 Air Quality

Affected Environment:

The proposed lease parcels are located throughout the Royal Gorge Field Office planning area boundaries. Table 3-X below shows the parcel summary data on a per County basis. An analysis of the COGCC database for producing wells within the County is also provided to convey some level of current intensity for oil and gas development within the vicinity of the parcels.

Table 3-X. Parcel Data

County	Parcel Count	BLM Acres	Private / Other Acres	Current County Producing Wells
Baca	2	0	849	130
Bent	57	126	49,408	30

Cheyenne	16	0	3,160	300
Crowley	7	80	1,090	0
Kiowa	28	1,532	6,472	100
Lincoln	9	77	403	38
Otero	8	18	600	0
Park	6	160	2,690	0
Prowers	20	40	7,175	26
Weld	2	0	280	>5000

The U.S. Environmental Protection Agency (EPA) has established national ambient air quality standards (NAAQS) for criteria pollutants, including carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM_{10} and $PM_{2.5}$), sulfur dioxide (SO_2), and lead (Pb). Exposure to air pollutant concentrations greater than the NAAQS has been shown to have a detrimental impact on human health and the environment. The EPA has delegated regulation of air quality under the federal Clean Air Act to the State of Colorado. The Colorado Department of Public Health and Environment (CDPHE), Air Pollution Control Division (APCD) administers Colorado's air quality control programs and is responsible for issuing permits for emission sources. The State has established the Colorado Ambient Air Quality Standards (CAAQS), which can be more, but not less stringent then the NAAQS. In addition to the criteria pollutants, regulations also exist to control the release of hazardous air pollutants (HAPs). HAPs are chemicals that are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental effects. EPA currently lists 188 identified compounds as hazardous air pollutants, some of which can be emitted from oil and gas development operations, such as benzene, toluene, and formaldehyde. Ambient air quality standards for HAPs do not exist; rather these emissions are regulated by the source type, or specific industrial sector responsible for the emissions.

Ambient air quality in the affected environment (i.e. compliance with the NAAQS) is demonstrated by monitoring for ground level (i.e. receptor height) atmospheric air pollutant concentrations. In general, the ambient air measurements show that existing air quality in the region is good. Concentrations for the various air pollutants are below the applicable state and federal ambient air quality standards. The majority of the parcels are located in the eastern plains counties, which are those to the east of the urbanized I-25 corridor. According to CDPHE, there have been a number of communities that were monitored for particulates and meteorology but not for any of the gaseous pollutants. The monitors were discontinued in the late 1970's and early 1980's after a review of the data showed that the concentrations were well below the standard and trending downward. Currently, there are two PM_{10} monitoring sites and one meteorological site in Lamar and a background $PM_{2.5}$ monitor in Elbert County. The Lamar monitors have recorded exceedances of the 24-hour PM_{10} standard in the past three years,

however CDPHE maintains the exceedences were associated with high winds and blowing dust from dry conditions.

Only the Park and Weld County parcels are located out of the CDPHE eastern plains monitoring area. Ozone monitoring in Park county shows the air quality is easily attaining the standard. Weld County has experienced ozone issues in the past and portions of the county are currently designated as non-attainment for the 8 hour ozone standard. Ozone is not emitted directly from sources, but is chemically formed in the atmosphere via interactions of oxides of nitrogen (NO_X) and volatile organic compounds (VOCs) in the presence of sunlight and under certain meteorological conditions (NO_X and VOCs are Ozone precursors). Ozone formation and prediction is complex, generally results from a combination of significant quantities of VOCs and NO_X emissions from various sources within a region, and has the potential to be transported across long ranges. All but one of the parcels nominated for leasing are located outside of the ozone non-attainment area. Under the proposed action, the parcel within the nonattainment area would be deferred from leasing.

There is broad scientific consensus that humans are changing the chemical composition of Earth's atmosphere. Activities such as fossil fuel combustion, deforestation, and other changes in land use are resulting in the accumulation of trace greenhouse gasses (GHGs) such as carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), water vapor, and several industrial gases in our atmosphere. An increase in GHG emissions is said to result in an increase in the earth's average surface temperature, primarily by trapping and decreasing the amount of heat energy radiated by the earth back into space. The phenomenon is commonly referred to as global warming. Global warming is expected, in turn, to affect weather patterns, average sea level, ocean acidification, chemical reaction rates, precipitation rates, etc., which is commonly referred to as climate change. The Intergovernmental Panel on Climate Change (IPCC) has predicted that the average global temperature rise between 1990 and 2100 could be as great as 5.8°C (10.4°F), which could have massive deleterious impacts on the natural and human environments. Although GHG levels have varied for millennia (along with corresponding variations in climatic conditions), industrialization and burning of fossil carbon sources have caused GHG concentrations to increase measurably, from approximately 280 ppm in 1750 to 396 ppm in 2012 (as of June). The rate of change has also been increasing as more industrialization and population growth is occurring around the globe. This fact is demonstrated by data from the Mauna Loa CO_2 monitor in Hawaii that documents atmospheric concentrations of CO_2 going back to 1960, at which point the average annual CO_2 concentration was recorded at approximately 317 ppm. The record shows that approximately 70% of the increases in atmospheric CO_2 concentration, or build up, since pre-industrial times has occurred within the last 50 years. In the coming decades climate change may lead to changes in the Mountain West and Great Plains, such as increased drought and wild land fire potential.

Environmental Effects

Proposed Action:

Direct and Indirect Impacts: The decision to offer the identified parcels for lease would not result in any direct emissions of air pollutants. However, the future development of these leases will result in emissions of criteria, HAP and GHG pollutants. The assessment of the relationship between GHG emissions and climate change is in a formative phase. While it is not possible to accurately quantify potential GHG emissions in the affected areas as a result of making the proposed tracts available for leasing, some general assumptions can be made (e.g., selling the proposed tracts may lead to the drilling of new wells). Subsequent development of any leases sold would result in an incremental increase in overall emissions of pollutants, including GHGs.

While the act of leasing the parcels would produce no significant air quality effects, potential future development of the lease could lead to increases in area and regional emissions. Since it is unknown if the parcels would be developed, or the extent of the development, it is not possible to reasonably quantify potential air quality effects through dispersion modeling or another applicable method at this time. Additional air effects will be addressed in a subsequent analysis when lessees file an Application for Permit to Drill (APD). All proposed activities including, but not limited to, exploratory drilling activities would be subject to applicable local, State, and Federal air quality laws and regulations.

Any subsequent activity authorized after APD approval could include soil disturbances resulting from the construction of well pads, access roads, pipelines, power lines, and drilling. Any disturbance is expected to cause increases in fugitive dust and potentially inhalable particulate matter (specifically PM_{10} and $PM_{2.5}$) in the project area and immediate vicinity. Particulate matter, mainly dust, may become airborne when drill rigs and other vehicles travel on dirt roads to drilling locations. Air quality may also be affected by exhaust emissions from engines used for drilling, transportation, gas processing, compression for transport in pipelines, and other uses. These sources will contribute to potential short and longer term increases in the following criteria pollutants: carbon monoxide, ozone (a secondary pollutant, formed photochemically by combining VOC and NO_X emissions), nitrogen dioxide, and sulfur dioxide would also occur due to combustion of fossil fuels during exploration and development activities. Non-criteria pollutants (for which no national standards have been set) such as carbon dioxide, methane and nitrous oxide (GHGs), air toxics (e.g., benzene), and total suspended particulates (TSP), as well as effects to visibility, and atmospheric deposition, may also increase as a result of exploration and development.

During exploration and development, ‘natural gas’ may at times be flared and/or vented from conventional, coal bed methane, and shale wells. The gas is likely to contain volatile organic compounds that could also be emitted from reserve pits, produced water disposal facilities, and/or tanks located at the site. The development stage may likely include the installation of

pipelines for transportation of raw product. New centralized collection, distribution and/or gas processing facilities may also be necessary.

The BLM will continue to evaluate the impacts of oil and gas exploration and development on the global climate, and apply appropriate management techniques and BMPs to address changing conditions. Research has identified the general potential impacts of anthropogenic GHG emissions and their effects on global climatic conditions. Anthropogenic GHGs differentially absorb and emit thermal radiation in the atmosphere and therefore may contribute incrementally to climate change. Changes in global temperatures and climate vary significantly with time, and are subject to a wide range of driving factors and complex interrelationships. Research on climate change impacts is an emerging and rapidly evolving area of science, but given the lack of adequate analysis methods it is not possible to identify specific local, regional, or global climate change impacts based on potential GHG emissions from any specific project's incremental contributions to the global GHG burden.

Substantial emission-generating activities cannot occur without further BLM analysis and approval of proposals for exploration and development operations. BLM will make its approval of these activities subject to conditions of approval addressing air pollutant emissions, as appropriate.

Protective/Mitigation Measures: Oil and or gas may be developed and produced subsequent to the proposed lease sale and ultimately be utilized to produce energy. The BLM will evaluate potential emissions of regulated air pollutants (including GHGs) associated with the development of the oil and gas resources in a subsequent analysis at the APD stage of the lease life cycle.

Conditions of approval (COAs) may be added at the permitting stage based on the review of site specific proposals, other applicable analysis of future exploration/development activities, or if new information becomes available and the mitigation proposed is supported by concise site specific NEPA analysis. COAs cannot take away lease rights or prevent development. All proposed activities including, but not limited to, exploration drilling activities would be subject to local, State, Tribal, and Federal air quality laws and regulations.

Project specific emissions can generally be quantified and compared to overall sector, regional, or global (GHGs) estimates, as well as current air quality monitoring data and trends to provide some measures/context of the level and significance of any potential impacts. The BLM will continue to evaluate climatic variability and change in the future, and apply appropriate management techniques and policy to address changing conditions as developments occur.

Cumulative Impacts: Development of parcels sold in this lease sale, when combined with impacts from other past, present and reasonably foreseeable actions (including increased traffic

and water disposal facilities) may contribute to the deterioration of air quality in eastern Colorado. Increased development of fluid minerals will result in a cumulative increase in emissions associated with surface and subsurface disturbances, drilling and completion activities, and production. The type of impacts will be the same as described under environmental impacts associated with the proposed action. However, the severity of the impacts could be elevated based on any contemporaneous development in surrounding areas.

Preferred Alternative:
Direct and Indirect Impacts: The impacts of leasing the parcels under the preferred alternative would be similar to the proposed action; however the removal of parcels in Park County would further reduce the potential for air impacts in that region.

Cumulative Impacts: Same as Proposed Action

Mitigation/Residual Effects: None

No Action Alternative:
Direct and Indirect Impacts: There would be no additional impacts to air quality or climate from the No Action Alternative. Leasing the parcels would not occur, nor would any subsequent potential development of the parcels occur.

Protective/Mitigation Measures: None

Cumulative Impacts: None

3.2.2 Climate
Affected Environment:
On-going scientific research has identified the potential impacts of so-called Greenhouse Gas (GHG) emissions such as carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), water vapor; and several trace gases on global climate. Through complex interactions on a global scale, GHG emissions cause a net warming effect of the atmosphere, primarily by decreasing the amount of heat energy radiated by the earth back into space. Although GHG levels have varied for millennia (along with corresponding variations in climatic conditions), industrialization and burning of fossil carbon sources have caused GHG concentrations to increase measurably and may contribute to overall climatic changes.

The EPA (Region 8) has reported "In the coming decades, scientists project that climate change will lead to significant changes in the Mountain West and Great Plains" including several

specific impacts. The BLM will continue to evaluate climatic variability and change in the future, and apply appropriate management techniques to address changing conditions.

Environmental Effects:

Proposed Action:

Direct and Indirect Impacts: The decision to sell the leases would not result in any direct criteria pollutants, hazardous pollutants, and greenhouse gas emissions. However, the future development of these leases would emit these pollutants. This EA incorporates an analysis of the contributions of the proposed action to both air pollutant and GHG emissions. Air quality and climate are the components of air resources, which include applications, activities, and management of the air resource. Therefore, the BLM must consider and analyze the potential effects of the BLM and BLM-authorized activities on air resources as part of the planning and decision making process.

Assuming that development could eventually occur, an analysis (Archer 2011) was performed comparing air pollutant and so-called "greenhouse" gas emissions due to assumed oil and gas activities under “High” and “Low” scenarios. The analysis includes construction emissions (well pad and access road construction, as well as initial drilling), production emissions (vehicle traffic and on-site equipment), and maintenance emissions (periodic pad/road maintenance and well workovers), assumed to occur during the last/maximum (20th) year of development. All emissions are reported in tons per year (TPY).

For the “High” Scenario, it was assumed 95 oil and gas wells would be in production (based on 19 years of development at a 100% success rate), 5 wells would be drilled during the 20th year, for an ultimate total of 100 wells.

Criteria Pollutant Emissions (TPY)

carbon monoxide (CO) - 72
oxides of nitrogen (NOx) - 55
particulate matter less than 10 microns in diameter (PM-10) - 87
particulate matter less than 2.5 microns in diameter (PM-2.5) - 9
sulfur dioxide (SO2) - < 0.01
volatile organic compounds (VOC) - 557

"Greenhouse" Gas Emissions (TPY)

carbon dioxide (CO2) - 41,418
methane (CH4) - 1
nitrous oxide (N2O) – 0.2

For the “Low” Scenario, it was assumed 76 oil and gas wells would be in production (based on 19 years of development at a 100% success rate), 4 wells would be drilled during the 20th year, for an ultimate total of 80 wells.

Criteria Pollutant Emissions (TPY)
carbon monoxide (CO) - 57
oxides of nitrogen (NOx) - 44
particulate matter less than 10 microns in diameter (PM-10) - 69
particulate matter less than 2.5 microns in diameter (PM-2.5) - 7
sulfur dioxide (SO2) - < 0.01
volatile organic compounds (VOC) - 446

"Greenhouse" Gas Emissions (TPY)
carbon dioxide (CO2) - 33,135
methane (CH4) - 1
nitrous oxide (N2O) – 0.2

Protective/Mitigation Measures:
No additional mitigative measures beyond those required by applicable local, state and federal air quality laws and regulations (including those of the State of Colorado Department of Public Health and Environment, and the Colorado Oil and Gas Conservation Commission) would be required for leasing. However, additional requirements could be imposed based on a detailed, site-specific air quality impact analysis at the APD stage once a site-specific proposal is identified.

Cumulative Effects:
This section incorporates an analysis of the contributions of the proposed action to GHG emissions and a general discussion of potential impacts to climate.

The EPA’s Inventory of US Greenhouse Gas Emissions and Sinks found that in 2009, total U.S. GHG emissions were almost 7 billion (6,639.7 million) metric tons and that total U.S. GHG emissions have increased by 7.4% from 1990 to 2009 (EPA, 2011). Emissions declined from 2008 to 2009 by 6.0% (422.2 million metric tons CO2e). The primary causes of this decrease were the reduced energy consumption during the economic downturn and increased use of natural gas relative to coal for electricity generation (EPA, 2011).

On-going scientific research has identified the potential effects of anthropogenic GHG emissions such as carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O) and several trace gasses; changes in biological carbon sequestration; and other changes due to land management activities on global climate. Through complex interactions on a global scale, GHG emissions cause a net warming effect of the atmosphere, primarily by decreasing the amount of heat energy radiated by

the earth back into space. Although natural GHG atmospheric concentration levels have varied for millennia (along with corresponding variations in climatic conditions), industrialization and burning of fossil carbon sources have caused GHG concentrations to increase.

This incremental contribution to global GHG gases cannot be translated into effects on climate change globally or in the area of this site-specific action. As oil and gas production technology continues to improve, and because of the potential development of future regulation or legislation, one assumption is that reductions in the rate or total quantity of GHG emissions associated with oil and gas production are likely. As stated in the direct/indirect effects section under climate change, the assessment of GHG emissions and the resulting impacts on climate is an ongoing scientific process. It is currently not feasible to know with certainty the net impacts from the proposed action on global or regional climate—that is, while BLM actions may contribute to the climate change phenomenon, the specific effects of those actions on global climate are speculative given the current state of the science. Therefore, the BLM does not have the ability to associate an action's contribution in a localized area to impacts on global climate change. Further, an IPCC assessment states that difficulties remain in attributing observed temperature changes at smaller than continental scales. It is currently beyond the scope of existing science to predict climate change on regional or local scales resulting from specific sources of GHG emissions.

Currently, global climate models are inadequate to forecast local or regional effects on resources (IPCC, 2007; CCSP, 2008). However, there are general projections regarding potential impacts to natural resources and plant and animal species that may be attributed to climate change from GHG emissions over time; however these effects are likely to be varied, including those in the southwestern United States (Karl et al., 2009). For example, if global climate change results in a warmer and drier climate, increased particulate matter impacts could occur due to increased windblown dust from drier and less stable soils. Cool season plant species' spatial ranges are predicted to move north and to higher elevations, and extinction of endemic threatened/endangered plants may be accelerated. Due to loss of habitat or competition from other species whose ranges may shift northward, the population of some animal species may be reduced or increased. Less snow at lower elevations would likely impact the timing and quantity of snowmelt, which, in turn, could impact water resources and species dependant on historic water conditions (Karl et al., 2009).

The *Final Colorado Greenhouse Gas Inventory and Reference Case Projections 1990-2020* estimates that approximately 6.5 million metric tons of GHGs from the natural gas industry and .18 million metric tons of GHGs from the oil industry are projected in 2010 as a result of oil and natural gas production, processing, transmission and distribution (CCS, 2007).

When compared to the total GHG emission estimates from the total number of oil and gas wells in the State, the average number of oil and gas wells drilled annually in the Field Office and associated GHG emission levels, represent an incremental contribution to the total regional and global GHG emission levels. The number of oil and gas wells that would eventually result from the proposed action would therefore likely represent an even smaller incremental contribution to GHGs emissions on a global scale.

The impact of climate change on BLM resources depends upon the location of the affected resource, its vulnerability and resiliency to change, and its relationship to the human environment. There will be positive and negative impacts of climate change, even within a single region. For example, warmer temperatures may bring longer growing seasons in some regions, benefiting farmers who can adapt to new conditions, but potentially harming native plant and animal species. In general, the larger and faster the changes in climate are, the more difficult it will be for human and natural systems to adapt.

According to the Colorado Water Conservation Board, temperatures in Colorado increased by approximately 2° F between 1977 and 2006. As reported in the 2007 Colorado Climate Action Plan developed by the state of Colorado, climate change effects within Colorado have included:

- shorter and warmer winters with a thinner snowpack and earlier spring runoff;
- less precipitation overall with more falling as rain;
- longer periods of drought;
- more and larger wildfires;
- widespread beetle infestations;
- rapid spread of West Nile virus due to higher summer temperatures.

In relation to a 1950-1999 baseline, climate models project that Colorado will warm 2.5° F by 2025, and 4° F by 2050. The 2050 projection indicates that summers will warm by +5° F, and winters by 3° F (Colorado Water Conservation Board 2008). Future predicted climate change impacts on Colorado include:

- more frequent and longer lasting heat extremes that stress electrical utility demands
- longer and more intense wildfire seasons
- midwinter thawing and earlier melting of snowpack
- lower river flows in summer months
- water shortages for irrigated agriculture
- slower recharge of groundwater aquifers
- migration of plant and animal species to higher elevations

more insect infestation in forests.

<u>Preferred Alternative:</u>

Direct and Indirect Impacts: The impacts of leasing the parcels under the preferred alternative would be similar to the proposed action; however the removal of parcels in Park County would further reduce the potential for greenhouse gas emissions in that region.

Cumulative Impacts: Same as Proposed Action

Mitigation/Residual Effects: None

No Action Alternative:
Direct and Indirect Impacts: There would be no additional impacts to air quality or climate from the No Action Alternative. Leasing the parcels would not occur, nor would any subsequent potential development of the parcels occur.

Protective/Mitigation Measures: None

Cumulative Impacts: None

3.2.3 Geologic and Mineral Resources

Affected Environment:
Most of the parcels are located in southeastern Colorado with a few located in the Denver Basin and South Park regions. The Las Animas Arch in southeastern Colorado contains subsurface sedimentary strata that range from Cambrian through Upper Cretaceous in age. The Denver Basin consists of Paleozoic, Mesozoic, and Cenozoic sedimentary rock layers. The South Park Basin is a wide faulted syncline sitting between the Front Range to the east and the Saguache Uplift to the west.
Eastern Colorado additionally supports a wide range of mineral development in addition to oil and gas, site specific geology would need to be analyzed during the APD NEPA process.

Environmental Effects

Proposed Action:
Sale of the parcels will allow development and recovery of oil and natural gas resources in the underlying oil and gas bearing formations.
Direct and Indirect Impacts: This activity could lead to increased development of federal mineral materials products for road and well pad construction to support oil and gas development.

Cumulative Impacts: The minerals resources throughout Front Range are slowly being encumbered by various surface uses that may not be compatible with future mining activities. Without understanding the mineral potential for the area of this proposed action, it is unknown if this action will contribute to a cumulative impact.

Mitigation/Residual Effects: Site specific geology would need to be analyzed during the APD NEPA process to determine if a separate permit would be required for use of federal minerals in the construction of roads, pad building, or for any other construction needs. Federal mineral materials regulations also apply to split-estate (i.e. a private surface landowner could not dispose of federal mineral materials for this project, surface or subsurface, without prior authorization from the BLM).

Preferred Alternative:
Direct and Indirect Impacts: The impacts of leasing the parcels under the preferred alternative would be similar to the proposed action; however the removal of parcels in Park County would further reduce the potential for impacts to mineral resources in that region.

Cumulative Impacts: Same as Proposed Action

Mitigation/Residual Effects: Same as Proposed Action

No Action Alternative:
Direct and Indirect Impacts: None
Cumulative Impacts: None
Mitigation/Residual Effects: None

3.2.4 Fluid Mineral Resources

Affected Environment: Most of the parcels are located in southeastern Colorado with a few located in the Denver Basin and South Park regions. The Las Animas Arch contains subsurface sedimentary strata that range from Cambrian through Upper Cretaceous in age. The primary plays for the Las Animas Arch have been the Lower Pennsylvanian sandstones and the Middle and Upper Pennsylvanian carbonates. The Denver Basin consists of Paleozoic, Mesozoic, and Cenozoic sedimentary rock layers. The primary producing plays in the Denver Basin are the Cretaceous Dakota Group (combined D and J sandstones) the J Sandstone deep gas (Wattenberg Play). The Niobrara shale oil play is also being developed in the Denver Basin. A few parcels are located in the Las Animas Arch province located in southeastern Colorado. The South Park Basin is a wide faulted syncline sitting between the Front Range to the east and the Saguache Uplift to the west. Oil and gas production is focused in the basin center parallel to 2 major thrust faults, the South Park and Elkhorn. The primary targets in the South Park Basin are similar to those found in the Denver Basin.
Specific Geologic formations would be analyzed during the APD NEPA process.

Environmental Effects
Proposed Action:

Sale of the parcels will allow development and recovery of oil and natural gas resources from subsurface oil and gas bearing formations.

Direct and Indirect Impacts: If the lease is issued, fluid minerals would potentially be drained from the lease parcel. During drilling operations on the parcels, loss of circulation or problems cementing the surface casing may affect freshwater aquifer zones encountered.

Cumulative Impacts: If the lease is issued, fluid minerals would potentially be drained from the lease parcel. During drilling operations on the parcels, loss of circulation or problems cementing the surface casing may affect freshwater aquifer zones encountered.

Mitigation/Residual Effects: The RGFO ensures the APD proposed casing and cementing program would be adequate to protect all of the resources, minerals and fresh water zones, in accordance with Onshore Order No. 2, 43 CFR §3162.5-2(d). Appropriate mitigation will be applied during the APD NEPA process in accordance with Onshore Order No. 2, 43 CFR §3162.5-2(d).

Preferred Alternative:
Direct and Indirect Impacts: The impacts of leasing the parcels under the preferred alternative would be similar to the proposed action; however the removal of parcels in Park County would reduce potential production.

Cumulative Impacts: Same as Proposed Action

Mitigation/Residual Effects: Same as Proposed Action

No Action Alternative:
If these lease parcels were withdrawn from the current lease sale, publicly owned oil and gas would not be developed through federal leases.

Direct and Indirect Impacts: The absence of federal leases could set up situations in which reservoirs could not be adequately developed and public minerals would be drained by nearby private or state wells, resulting in a loss of revenue due to drainage situations that could be resolved by timely leasing. Drainage cases commonly occur in northeastern Colorado where land and mineral ownership patterns are complex.

Cumulative Impacts: The absence of federal leases could set up situations in which reservoirs could not be adequately developed and public minerals would be drained by nearby private or state wells, resulting in a loss of revenue due to drainage situations that could be resolved by

timely leasing. Drainage cases commonly occur in areas like northeastern Colorado where land and mineral ownership patterns are complex.

Mitigation/Residual Effects: Due to complex land and mineral ownership patterns in the lease area, not leasing public minerals could increase the number of drainage cases in the proposed lease area that includes northeast Colorado.

Finding on the Public Land Health Standard for Oil and Gas Resources: The Proposed Action will not result in change to the physical environment; therefore, this action will not jeopardize oil and gas resources. Approval of oil and gas development on lease parcels will carry requirements for the construction of facilities and the conservation of resources to ensure adequate recovery of resource while protecting the human environment and correlative rights. Conservation, and logical development of the oil and gas resource while designed to ensure maximum recovery will also benefit the public land health standard.

3.2.5 Soils (includes a finding on Standard 1)

Affected Environment: The proposed lease parcels cover a large variety of soil types and conditions ranging from high elevation moist, cold soils in the South Park area to lower elevation dry, warmer soils in the east. These soils and associated topography vary in their suitability for use as roads, fill and related infrastructure during subsequent exploration and production of the lease.

Environmental Effects

Proposed Action:

Direct and Indirect Impacts: The act of leasing the parcels for oil and gas development would have no direct impact on soil resources; however impacts at the exploration and development stage would have impacts on soils. The magnitude and location of direct and indirect effects cannot be predicted until the site-specific APD stage of development. These parcels would be leased and conditions of approval would be added at the development stage to protect soil resources.

At the exploration and development stage, soils would be physically disturbed through the removal and compaction of soil and the exposure of subsoils. Direct impacts at this stage would result from the construction of well pads, roads, powerlines and other infrastructure removing vegetation, exposing soil, mixing horizons, compaction, loss of productivity, and loss of soil through wind/water erosion. On most of the lease parcels, wind erosion would be expected to be minor; however on some of the parcels in the northeast plains wind erosion could be severe. Decreased soil productivity as a result of these impacts has the potential to hinder revegetation efforts and leave soils further exposed to erosion. Segregation and reapplication of surface soils

would result in the mixing of shallow soil horizons, resulting in a blending of soil characteristics and types. This blending would modify physical characteristics of the soils, including structure, texture, and rock content, which could lead to reduced permeability and increased runoff from these areas.

Contamination of surface and subsurface soils can occur from leaks or spills of oil, produced water, and condensate liquids from wellheads, produced water sumps and condensate storage tanks. Leaks or spills of drilling and hydraulic fracturing chemicals, fuels and lubricants could also result in soil contamination. Such leaks or spills could compromise the productivity of the affected soils. Of these materials, leaks or spills of condensate would have the greatest potential environmental impact. Depending on the size and type of spill, the impact to soils would primarily consist of the loss of soil productivity. Typically, contaminated soils would be removed and disposed of in a permitted facility or would be bioremediated in place using techniques such as excavating and mulching to increase biotic activities that would break down petrochemicals into inert and/or common organic compounds. These direct impacts of the development phase are lessened through lease stipulations and the implementation of Best Management Practices. Parcels with soils that have aliquot parts with a high erosion hazard would have a condition of approval requiring the operator submit a construction/reclamation plan that includes specific criteria to protect soils.

Cumulative Impacts: Throughout the lease area there are many current and historic activities that affect soil resources. These activities include: oil and gas development, residential development, grazing, mining and recreation. At the 5th level watershed scale, the leasing and subsequent development of these parcels would add an additional impact to soil resources into the future. Most of this impact would be phased in and lessened as individual wells are completed and older wells are reclaimed.

Mitigation/Residual Effects: As described in Conditions of Approval at the APD stage, operators could stockpile the topsoil from the surface of well pads which would be used for surface reclamation of the well pads. If the well produces, the top soil can be used for interim reclamation of the areas of the well pad not in use. If the well is a dry hole, the soil can be used for immediate reclamation. The soil should not be stockpiled for more than one year. Soil stockpiling and re-spreading should be carried out under the advisement of BLM personnel. The impact to the soil would be remedied upon reclamation of well pads when the stockpiled soil that was specifically conserved to establish a seed bed is spread over well pads and vegetation re-establishes. Upon abandonment of wells and/or when access roads are no longer in service, the Authorized Officer would issue instructions and/or orders for surface reclamation/restoration of the disturbed areas as described in Conditions of Approval at the APD stage. An orderly system of road locations and road construction requirements (including regular maintenance) would alleviate potential impacts to the environment from the development of access roads.

The following parcels have soils with high erosion risk, #6305, 6306, 6307, 6510, 6509, 6508, 6512, 6323, 6319, 6317, 6320, The following Conditions of Approval would be analyzed at the APD stage:

1. All sediments generated from the surface-disturbing activity will be retained on site.

2. Vehicle use would be limited to existing roads and trails.

3. All new permanent roads would be built to meet primary road standards (BLM standards) and their location approved by the Authorized Officer. For oil and gas purposes, permanent roads are those used for production.

4. All geophysical and geochemical exploration would be conducted by helicopter, horseback, on foot, or from existing roads.

5. Any sediment control structures would be designed to contain a 100-year, 6-hour storm event. Storage volumes within these structures would have a design life of 25 years.

6. Reclamation of disturbed surfaces would be initiated before November 1 each year.

7. All reclamation plans would be approved by the Authorized Officer in advance and might require an increase in the bond.

Preferred Alternative:
Direct and Indirect Impacts: The impacts of leasing the parcels under the Preferred Alternative would be similar to the Proposed Action; however the removal of parcels in Park County would further protect soils in the upper South Platte Basin.

Cumulative Impacts: Cumulative impacts of the Preferred Alternative would be similar to the Proposed Action.

Mitigation/Residual Effects: The mitigations under the preferred alternative would be the same as the Proposed Action.

No Action Alternative:
Direct and Indirect Impacts: There would be no immediate or future impacts to soils due to oil and gas development if no action is taken.

Cumulative Impacts: None

Mitigation/Residual Effects: None

Finding on the Public Land Health Standard for Upland Soils: The Proposed Action will

not result in change to the physical environment; therefore, this action will not jeopardize soil resources on site. Any APD approved by the BLM on leased parcels in the future should contain the necessary COAs and BMPs to continue meeting the public land health standard.

3.2.6 Water (surface and groundwater, floodplains) (includes a finding on Standard 5)

Affected Environment:
Surface Water: The proposed lease parcels are located throughout the South Platte and Arkansas River basins of Colorado. These areas range from the headwater areas of these rivers in South Park to the eastern plains near Kansas. In general, the water quality in these rivers is good near the headwaters and declines as one goes downstream. The major water quality concerns for these waters is generally sediment and heavy metals in the mountains and progresses to more organic and salinity related issues on the plains. Potential impacts to site specific water quality associated with any exploration and development activities would be assessed for each location during specific project proposals (i.e. at the APD stage).
Ground Water: The proposed lease parcels are located throughout central and eastern Colorado in varying locations ranging from mountainous areas to the eastern plains. These leases occupy one of three general aquifers: the valley-fill and intermontane park aquifers in the west within South Park, the High Plains Aquifer in the far eastern plains, and the Dakota-Cheyenne Aquifer in the western portion of the eastern plains. Water quality in these aquifers is variable depending on which formation the water is located. In some formations, the water quality is very good, while in others, it is poor. Throughout the lease area, groundwater is relied upon for domestic and agricultural purposes.

Environmental Effects
Proposed Action:
Direct and Indirect Impacts: The act of leasing the parcels for oil and gas development would have no direct impact on water resources; however activities at the exploration and development stage could have impacts to water quality. The magnitude and location of direct and indirect effects cannot be predicted until the site-specific APD stage of development. At the APD stage, appropriate Conditions of Approval would be applied that would protect water quality. All parcels would be subject to all watershed protection ordinances of local municipalities.

Surface Water: Impacts to surface water resources would be associated with the surface disturbance from the construction of roads, pipelines, well pads, and power lines. Specific impacts would be soil compaction caused by construction that would reduce the soil infiltration rates, in turn increasing runoff during precipitation events. Downstream effects of the increased runoff may include changes in downstream channel morphology such as bed and bank erosion or accretion. Impacts would be greatest shortly after the start of the activity and decrease over time. These impacts can also be mitigated by the implementation of Best Management Practices (BMP) that would design facilities with temporary runoff control measures that would slow

down runoff and capture sediment. These BMP's would be included at the APD stage to address site specific conditions based on submitted Surface Use and Drilling Plans.
Chemicals, or other fluids, accidentally spilled or leaked during the development process could result in the contamination of both ground and surface waters. Authorization of development projects would be further analyzed at the APD stage and require full compliance with BLM directives and Conditions of Approval that relate to surface and groundwater protection.

Ground Water: The eventual drilling of the proposed parcels would most likely pass through useable groundwater. Potential impacts to groundwater resources could occur if proper cementing and casing programs are not followed. This could include loss of well integrity, surface spills, or loss of fluids in the drilling and completion process. It is possible for chemical additives used in drilling activities to be introduced into the water producing formations without proper casing and cementing of the well bore. Changes in porosity or other properties of the rock being drilled through can result in the loss of drilling fluids. When this occurs, drilling fluids can be introduced into groundwater without proper cementing and casing. Site specific conditions and drilling practices determine the probability of this occurrence and determine the groundwater resources that could be impacted. In addition to changing the producing formations' physical properties by increasing the flow of water, gas, and/or oil around the well bore hydraulic fracturing can also introduce chemical additives into the producing formations. Types of chemical additives used in drilling activities may include acids, hydrocarbons, thickening agents, lubricants, and other additives that are operator and location specific. These additives are not always used in these drilling activities and some are likely to be benign such as bentonite clay and sand. Concentrations of these additives also vary considerably since different mixtures can be used for different purposes in oil and gas development and even in the same well bore. If contamination of aquifers from any source occurs, changes in groundwater quality could impact springs and residential wells that are sourced from the affected aquifers. Onshore Order #2 requires that the proposed casing and cementing programs shall be conducted as approved to protect and/or isolate all usable water zones.

Known water bearing zones in the lease area are protected by drilling requirements and, with proper practices, contamination of ground water resources is highly unlikely. Casing along with cement is extended well beyond fresh-water zones to insure that drilling fluids remain within the well bore and do not enter groundwater. Potential impacts to ground water at site specific locations are analyzed through the NEPA review process at the development stage when the APD is submitted. This process includes geologic and engineering reviews to ensure that cementing and casing programs are adequate to protect all downhole resources.

Cumulative Impacts: Throughout the lease area there are many current and historic activities that affect water quality. These activities include: oil and gas development, residential development, grazing, mining and recreation. At the 5th level watershed scale, the leasing and

subsequent development of these parcels would add an additional impact to water resources into the future. Most of this impact would be phased in and lessened as individual wells are completed and older wells are reclaimed. Overall, it is not expected that the leasing and possible future development of the parcels would cause long term degradation of water quality below State standards.

Mitigation/Residual Effects: Future Conditions of Approval, and BLM directives, along with additional construction requirements, at the APD stage is adequate to protect water resources on the parcels being proposed for leasing. Due to the mountainous and high elevation nature of South Park, all parcels (#6484, 6485, 6486, 6487, 6488, and 6489) in South Park would apply the following mitigations/conditions of approval at the APD stage to further protect water quality in the upper South Platte Basin:

1. Pads would be sited and designed to divert offsite run-on around the pad. Run-on water may be diverted around the pad by sloping the pad or constructing diversion ditches or berms above and/or below the pad cut slope.

2. The BLM would require that an alternative to reserve, completion, and open production pits be used. Exceptions may only be granted in rare cases with sufficient justification (e.g., when sufficient protections are described in a design submitted for prior BLM approval) and after detailed NEPA analysis. When exceptions to this policy are granted, the BLM would consider more stringent operation, closure, and monitoring standards. In this situation, acceptable alternatives to reserve, completion, and production pits would be closed-loop drilling.

3. Below-grade enclosed tanks would not be permitted.

4. The use of evaporation ponds for means of disposing of produced water shall not be permitted on BLM administered lands or split estate.

5. Flowback and stimulation fluids need to be contained within tanks that are placed on a well pad or in an area with down-gradient berming.

6. Above-grade tanks that contain fluids other than fresh water must adhere to the following standards:

   a. Secondary containment storage around the tanks for spill control must be impermeable and capable of holding at least 133 percent of the total volume of the largest tank or of all interconnected tanks inside the containment area.

   b. The containment system must be capable of containing the wastes or product such that the material will not escape the containment system prior to cleanup.

c. Secondary containment structures shall be protected from livestock, wildlife, and human activities. This may be accomplished by fencing, graveling over earthen berms, expanded metal or grate covers, etc.

7. In drilling and abandonment scenarios (where production casing is not run on wells that are drilled and determined not to be commercially productive), part of the plugging procedure shall include cementing the whole open hole section of the well from total depth and going uphole until a 200' overlap above the surface casing shoe is achieved.

8. For drilling wells that are commercially productive, cement behind the production casing (and intermediate casing, if applicable) shall be brought from total depth going uphole to provide a 200' overlap above the surface casing shoe. A cement bond log shall be run on both intermediate and production casing strings to determine the top of cement and degree of bond.

9. A mechanical integrity test of any shut-in or temporarily abandoned well shall be conducted every two years.

10. While cementing the surface casing, if cement returns do not come to the surface and remain at surface, a topout cement job shall be performed at surface, and a cement bond log shall be run to determine the actual top of cement and the degree of bond behind pipe. Based on the log analysis, additional remedial cementing actions may need to be performed to mitigate voids behind pipe to ensure surface groundwaters are protected.

11. In areas where there is little geologic data available, an open hole log suite (GR/SP/resistivity/porosity combination) may be required to adequately evaluate reservoir quality and fluid content of the Fox Hills Sandstone and any other potential useable water resources in the area, prior to setting the surface casing.

12. Modifications to these mitigations/conditions of approval would be granted by the authorized officer if it can be demonstrated that the surface disturbing activity would cause negligible impacts or improve the water quality in a detailed, site specific analysis. An example of this would be the implementation of a professionally engineered design, construction, maintenance, and reclamation plan designed to mitigate to the fullest extent practicable all potential resource damage associated with the potential future development.

Additional site specific mitigation measures would be analyzed and added at the APD stage.

<u>Preferred Alternative</u>:
Direct and Indirect Impacts: The impacts of leasing the parcels under the Preferred Alternative would be similar to the Proposed Action; however the removal of parcels in Park County would further protect water quality in the upper South Platte Basin.

Cumulative Impacts: Cumulative impacts of the Preferred Alternative would be similar to the Proposed Action.

Mitigation/Residual Effects: Future Conditions of Approval, and BLM directives, along with additional construction requirements, at the APD stage is adequate to protect water resources on the parcels being proposed for leasing.

No Action Alternative:
Direct and Indirect Impacts: If these lands are not leased for oil and gas development, no new impacts to water resources would occur; however it is likely that development would still continue on adjacent private lands.

Cumulative Impacts: None
Mitigation/Residual Effects: None

Finding on the Public Land Health Standard for Water Quality: The Proposed Action will not result in change to the physical environment; therefore, this action will not jeopardize water quality. Any APD approved by the BLM on leased parcels in the future should contain the necessary COAs and BMP stipulations to continue meeting the public land health standard.

3.3 BIOLOGICAL RESOURCES

3.3.1 Invasive Plants*

Affected Environment: Invasive species and noxious weeds occur on BLM surface acres within the affected area. Downy brome (cheatgrass) and other annual weeds are common along roadsides and on other disturbed areas. Houndstongue, Canada thistle, bull thistle, musk thistle, Russian thistle, spotted and diffuse knapweeds, leafy spurge, and hoary cress are also known to occur in these areas. Other species of noxious weeds can be introduced by vehicle traffic, livestock and wildlife and will readily spread into newly disturbed areas. The BLM and county weed and pest managers collaborate in their efforts to control weeds and find the best integrated approaches to achieve these results. For all actions on public lands that involve surface disturbance or rehabilitation, reasonable measures are required to prevent the introduction or spread of noxious weeds. These measures may include power washing or air blasting of construction equipment to remove soil, oil, and vegetative parts and requirements for using certified weed-free seed and weed-free hay, mulch, and straw. In addition, any actions that result in the introduction or spread of invasive non-native or noxious weeds would be mitigated by standard weed management guidelines under the direction of the BLM.

Environmental Effects
Proposed Action

Direct and Indirect Impacts: If drilling were to occur on these parcels subsequent activities would create an environment for and provide a mode of transport for invasive species and other noxious weeds to become established. Construction equipment and any other vehicles or equipment brought onto the site can introduce weed species. Wind, water, recreation vehicles, livestock and wildlife would also assist with the distribution of weed seed into the newly disturbed areas. Non-native and invasive weed species that occur on adjacent rangelands would occupy disturbed areas; the bare soils and the lack of competition from a perennial plant community would allow these weed species to grow unchecked and can affect the establishment of seeded plant species. Establishment of perennial grasses and other seeded plants as part of interim reclamation is expected to reduce the presence of invasive annual weeds.

At the APD stage, the operator would be required to control any invasive and\or non-native weeds that become established within the disturbed areas involved with drilling and operating the well and continue weed control actions throughout the life of the project.

Cumulative Impacts: No determination regarding cumulative impacts can be made at the leasing stage. Cumulative impacts will be determined when site specific analysis is addressed at the APD stage.

Mitigation/Residual Effects: The site should be monitored for non-native species prior to soil disturbing activities and for at least two growing seasons after the project area has been rehabilitated. All non-native species identified by monitoring must be treated. Proponent will be responsible for Monitoring and treatment of non-native species. Periodic monitoring would be done by BLM staff.

Preferred Alternative:
Direct and Indirect Impacts: The impacts of leasing the parcels under the Preferred Alternative would be similar to the Proposed Action; however the removal of parcels in Park County would further protect native vegetation from invasive plants in South Park.

Protective/Mitigation Measures: Future Conditions of Approval, and BLM directives at the APD stage is adequate to protect native vegetation from invasive plants on the parcels being proposed for leasing.

Cumulative Impacts: Cumulative impacts of the Preferred Alternative would be similar to the Proposed Action.

No Action Alternative
Direct and Indirect Impacts: None
Cumulative Impacts: None

Mitigation/Residual Effects: None

*Invasive plants are plants that are not part of (if exotic), or are a minor component of (if native), the original plant community or communities that have the potential to become a dominant or co-dominant species on the site if their future establishment and growth are not actively controlled by management interventions, or are classified as exotic or noxious plants under state or federal law. Species that become dominant for only one to several years (e.g., short-term response to drought or wildfire) are not invasive plants.

3.3.2 Threatened, Endangered and Sensitive Species (includes a finding on Standard 4)

Affected Environment: No federally listed species has the potential to be directly influenced by development of the proposed leases based on existing data from the BLM, Colorado Natural Heritage Program and Colorado Parks and Wildlife. The lesser prairie chicken (LPC) (proposed threatened species) and the mountain plover, black-tailed prairie dog, swift fox, Townsend's big eared bat, common kingsnake, milk snake, massasauga, American white pelican, northern goshawk, ferruginous hawk and bald eagle (BLM sensitive species) could potentially occur on parcels up for leasing.

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. Protective measures for these species will be applied, if necessary, at the APD stage and might include the need to move drill rigs, timing restriction, etc. Additional NEPA will be completed as individual APDs are received for all the parcels identified in this document. Site specific visits will be conducted as deemed necessary for those parcels that contain sensitive species habitat. Water depletions from South Platte River watershed may affect the least tern, whooping crane, piping plover and pallid sturgeon or its habitat if leased parcels are developed.

Lesser prairie chicken: Lesser prairie chickens were likely resident in six counties in Colorado prior to European settlement (Giesen 2000). At present, lesser prairie chickens LPC are known to occupy portions of Baca, Cheyenne, Prowers, and Kiowa counties, but are not known to persist in Bent and Kit Carson counties. Critical habitat has not been designated for the LPC; however, Colorado Parks and Wildlife has designated LPC production areas around known active leks. On December 11, 2012, the USFWS proposed listing the LPC as a threatened species under the Endangered Species Act.

Mountain Plover: Mountain Plover's are found throughout the Royal Gorge Field Office (RGFO) in suitable habitats. While the species is relatively rare they can be found generally in open, flat tablelands that display some function of disturbance such as drought, grazing, fire, etc. (Knopf and Miller 1994). Mountain Plover's occupy portions of Larimer, Weld, Logan, Morgan, Washington, Yuma, Adams, Arapahoe, Elbert, Lincoln, Kit Carson, El Paso, Cheyenne, Pueblo, Crowley, Kiowa, Otero, Bent, Prowers, Huerfano, Las Animas, Baca, and Park counties in the RGFO. Plover habitat could potentially be found on all parcels within the lease sale.

Black-tailed prairie dog: The BLM considers the black-tailed prairie dog a sensitive species. Black-tailed prairie dogs primarily occur in scattered colonies throughout the eastern plains of Colorado. In the summer of 2001, Colorado started aerial surveys for black-tailed prairie dogs throughout their historic range. Based on known locations of black-tailed prairie dogs, transects were developed for each county to give a 95% confidence interval to the resulting data. Statewide 631,000 acres of black-tail prairie dog colonies were documented.

Swift Fox: Swift foxes primarily occur in short-grass and mixed-grass prairie in the eastern plains of Colorado. The distribution of swift foxes became severely reduced in concert with conversion of mid- and shortgrass prairies to agriculture. Swift fox dens occur in ridges, slopes, hill tops, pastures, roadside ditches, fence rows and cultivated fields. Dens may be relatively close to human habitations and swift foxes occasionally den in human-made structures such as culverts. Swift foxes primarily consume animals, with leporids and rodents the most frequent prey.

Townsend's big-eared bat: The Townsend's big-eared bat occurs throughout the west and in Colorado. Habitat associations include: coniferous forests, deserts, native prairies, riparian communities, and agricultural areas. It's distribution is strongly correlated with the availability of caves and cave-like roosting habitat, with population centers occurring in areas dominated by exposed, cavity forming rock and/or historic mining districts. It's habit of roosting on open surfaces makes it readily detectable, and it is often the species most frequently observed (commonly in low numbers) in caves and abandoned mines throughout its range. It has also been reported to utilize buildings, bridges, rock crevices and hollow trees as roost sites.

Foraging associations include: edge habitats along streams, adjacent to and within a variety of wooded habitats. It often travels large distances while foraging, including movements of over 10 miles during a single evening. It is a moth specialist with over 90% of its diet composed of lepidopterans.

The primary threat to the species is almost certainly disturbance or destruction of roost sites (e.g., recreational caving, mine reclamation, renewed mining in historic districts). This species is very sensitive to disturbance events and has been documented to abandon roost sites after human visitation. Both roosting and foraging habitat may be impacted by timber harvest practices. Pesticide spraying in forested and agricultural areas may affect the prey base.

Common king snake: Generally associated with lowland river valleys. In Southeastern Colorado it has been found near irrigated fields on the floodplain of the Arkansas River, in rural residential areas in plains grassland, near stream courses, and in other areas dominated by shortgrass prairie. Most activity occurs on the ground or in rodent burrows. Periods of inactivity

are spent in burrows and logs, in or under old buildings, in other underground spaces, or beneath various types of cover.

Known from a few locations in southeastern Colorado (north to the vicinity of the Arkansas River) and a few sites in extreme southwestern Colorado (western Montezuma County), at elevations below about 5,200 feet. Generally difficult to find but may be locally fairly common in the very restricted range in Colorado.

Milk snake: Wide variety of habitats in Colorado, including shortgrass prairie, sandhills, shrubby hillsides, canyons and open stands of ponderosa pine with Gambel oak in the foothills, piñon-juniper woodlands, arid river valleys, and abandoned mines; generally stays hidden, except at night; found under discarded railroad ties in sand-hill regions. Hibernation sites include rock crevices that may be shared with other snake species.

Throughout most of Colorado at elevations primarily below 8,000 feet. Generally scarce or at least hard to find, but locally fairly common.

Massasauga: Habitat in Colorado consists of dry plains grassland and sandhill areas. Massasaugas may be attracted to sandy soils supporting abundant rodent populations. Great Lakes region of southern Ontario and western New York southwest through the Midwest and central and southern Great Plains to southeastern Arizona, northern Mexico, and southern Texas. Occurs in southeastern Colorado at elevations below about 5,500 feet.

American white pelican: Habitat includes rivers, lakes, reservoirs, estuaries, bays, and open marshes, sometimes inshore marine habitats. Pelicans rest/roost on islands and peninsulas. Nests usually are on islands or peninsulas (natural or dredge spoils) in brackish or freshwater lakes and reservoirs, or on ephemeral islands in shallower wetlands as in the northern Great Plains or on the Texas coast. Eggs are laid on the ground in a slight depression or on a mound of earth and debris 24-36 inches across, 15-20 inches high, usually on low flat, or gently sloping terrain. Nest sites usually are in open areas but often near vegetation, driftwood, or large rocks. Many of the reservoirs within the RGFO resource area serve as important foraging and nesting locations. In this lease sale, parcels near John Martig Reservoir may have pelican habitat (6363, 6522).

Northern goshawk: Northern goshawks are associated with coniferous and mixed forests through much of the Northern hemisphere. Studies of nesting habitat show that goshawks nest in older-aged forests with variable tree species. The most consistent vegetative characteristic of goshawk nest sites is high percent canopy closure. Studies on habitat characteristics at goshawk sites have reported average canopy closure measurements ranging from 60% in eastern Oregon, 77% in northern California and 94% in northwestern California. Stand structure ranges from

dense multi-layered stands in Oregon to open park-like understories in Colorado and California. Average tree size is just as variable with mean tree diameters ranging from 8-20 inches in Colorado, and 20 inches in Oregon. Goshawks appear to prefer north to east aspects for nest sites as stands on these aspects are typically denser and more suitable. Slope also appears important as nests are usually placed on flat to moderately sloped land where trees are able to grow larger and at a higher density (1-39%). The importance of the proximity of the nest area to water is not known.

Knowledge of the foraging habitat is poor. The goshawk is a height zone generalist, taking prey from the ground-shrub, shrub-canopy, and canopy layers and they have a preference for woodlands with large, mature trees. Meadows, streams, and aspen stands may be important to prey species on which the goshawk feeds. Goshawks, however, forage in a variety of habitats probably along edge as well as in deep forests, provided that there is available prey and the vegetation is not too dense to prevent flight. Prey plucking sites within the nesting territory is also a habitat characteristic related to foraging. Prey plucking sites usually consist of stumps, fallen logs, snags, arched trees, rocks, or horizontal tree limbs below the canopy. Available evidence suggests that two important resources, food and nest habitat, are the principle mechanisms limiting goshawk densities. Specifically, populations may be limited by shortage of nest sites; and where nest sites are readily available, densities may be limited by food abundance and availability.

Very little goshawk habitat is managed by the BLM. Public lands are generally lower elevation forests consisting primarily of pinyon-juniper vegetation. Only small areas within the proposed lease parcels would be considered suitable habitat for goshawk.

<u>Ferruginous hawk</u>: The ferruginous hawk inhabits grasslands and semidesert shrublands, and is rare in piñon-juniper woodlands. Breeding birds nest in isolated trees, on rock outcrops, structures such as windmills and power poles, or on the ground. Winter residents concentrate around prairie dog towns. Winter numbers and distribution fluctuate greatly according to the availability of prairie dogs; when a local prairie dog population dies off due to plague, hawk numbers decrease drastically. Migrants and winter residents may also occur in shrublands and agricultural areas.

Winter resident on eastern plains, at the same time it is a rare summer resident locally on eastern plains, and occurs very locally in Moffat and Routt counties, along the Book Cliffs, in the Grand Valley, and in the San Luis Valley.

Bald eagle: Colorado populations of bald eagles typically nest in large cottonwood trees along rivers and reservoirs. Eagle densities reach their peak during the winter months when migrants

arrive from the north. Bald eagle usage (winter roosting, nesting, etc.) occurs near several major riparian areas and reservoirs on the eastern plains.

Environmental Effects

Proposed Action

Direct and Indirect Impacts: The act of leasing the parcels for oil and gas development would have no direct impact on wildlife resources; however, exploration and development of leased parcels would likely impact wildlife. The magnitude and location of direct and indirect effects cannot be predicted until the site-specific APD stage of development. However, the authorization to lease parcels for oil and gas development will likely result in future development at some locations. At this time, the speculative nature of this process does not provide specifics of development; therefore, impacts to terrestrial wildlife from development remain unknown. Potential effects of development for some species are below.

Lesser Prairie Chicken: Pitman et al. (2005) studied LPC in southwestern Kansas from 1997-2002. They examined nest distances from anthropogenic features (wellheads, buildings, improved roads, unimproved roads, transmission lines, and center pivot irrigation fields) to determine if the features were related to location and success of nests. They found that anthropogenic features (transmission lines, wellheads, buildings, improved roads, center-pivots) were avoided by nesting LPC when compared to random points within the study area. The overall impact of this avoidance is the reduction in LPC nesting habitat, which was estimated at 7,114 ha (53%) of the 13,380 ha in the study area.

Patten et al. (2005) studied populations of LPCH in New Mexico and Oklahoma from 1999-2003. They radio-tracked 93 females and 188 males in New Mexico and 62 females and 191 males in Oklahoma and found that female mortality was significantly higher in Oklahoma when compared to their study population in New Mexico. They found that the cause for this increase in mortality was related to collisions with fences, power lines, and vehicles, which was three times higher than that in the study birds in New Mexico.

Bidwell et al. (2003) suggests that LPC avoid high quality habitat within 200 meters of a single oil well or gas pump and they avoid areas within 600 meters of an unimproved road and within 1,000 meters of an elevated power line.

Crawford and Bolen (1976) found that a constructed road through rangeland caused the abandonment of the otherwise traditional lek.

Woodward et al. (2001) performed geographic information system (GIS) analysis on landscapes and landscape change through time. They then compared this to the trend in LPC populations.

They found that LPCH populations with a declining population trend were related to landscapes with higher rates of landscape change and greater loss of shrub land cover types.

The USFWS has proposed to list the lesser prairie chicken as a threatened species under the Endangered Species Act (ESA). The BLM is to manage proposed species in a manner to prevent official listing by the ESA. Recent research indicates that development of anthropogenic infrastructure is causing a deleterious effect on reproductive success and chicken populations. Related to mineral leasing and development, existing lesser prairie chicken habitat should be protected from development as the presence of buildings, improved roads, transmission lines, center-pivot files, and wellheads reduce potential nesting habitat for a radius of up to 1 km.

The RGFO completed RMP plan maintenance in August 2008 that modified the CO-02, CO-30 and RGO-3 stipulation language originally adopted in the RGFO RMP signed in 1995. The previous stipulations were No Surface Occupancy (NSO) within 0.25 mile of an active lek (CO-02) and a timing limitation stipulation that prohibited fluid mineral exploration and development activities from March 1 through July 31, within 1.25 mile of an active lek (CO-30 and RG-03). These stipulations were modified to NSO within 0.60 mile of an active lek and a timing limitation prohibiting fluid mineral exploration and development activities from March 15 through July 15 within 2.2 miles of an active lek. Furthermore, the maintenance action defined an "active lek" as a lek that has been occupied within the last three years. The adjustments to lease stipulations for lesser prairie chicken were needed based on new research information, a severe decline in the Colorado population, increased oil and gas leasing within lesser prairie chicken habitat and a request from the Colorado Division of Wildlife (now Colorado Parks and Wildlife) to strengthen stipulation for the species. The following parcels are within mapped LPC leks and/or nesting habitat: 6287, 6288, 6351, 6352, 6353, 6354, 6355, 6367, 6459, 6460, 6461, 6462, and 6481.

In light of the December 11, 2012, USFWS proposal to list the lesser prairie chicken as a threatened species, RGFO would recommend deferral of the following parcels under the proposed action: 6287, 6288, 6330, 6349, 6351, 6352, 6353, 6354, 6355, 6356, 6357, 6358, 6359, 6360, 6367, 6377, 6383, 6459, 6460, 6461, 6462, and 6481 (Attachment B). These parcels occur within LPC habitat as mapped by Colorado Parks and Wildlife. Deferring the listed parcels would provide an opportunity for BLM to confer with state and federal agencies regarding the effectiveness of existing stipulations and other measures for protection and conservation of LPC and its habitat.

<u>Mountain Plover</u>: Oil and gas extraction activities may be compatible with Mountain Plover needs. In Utah, disturbed areas around oil well pads create open habitat with high amounts of bare ground suitable for Mountain Plovers (Day 1994). Ball (1996) recommended curtailing or prohibiting activities during the peak breeding period (April-July); however, Mountain Plovers in

southeastern Wyoming did not seem to be disturbed by nearby mining activity (Parrish 1988). Mountain plovers nest on nearly level ground (often near roads), adults and chicks often feed on or near roads, and roads may be used as travel corridors by mountain plovers, all of which make plovers susceptible to being killed by vehicles. The protective stipulation RG-19 is a timing stipulation to protect the breeding and brood rearing periods for mountain plover. Parcels 6484, 6485, 6486, 6487, 6488, and 6489 contain mapped plover habitat in South Park, Colorado.

Black-tailed prairie dog: There is likely little impact due to development to prairie dog populations. Prairie dogs typically thrive in the interface of development and natural ecosystems. However, structures erected within active prairie dog colonies that provide perches for raptors will increase preying on individuals.

Swift Fox: Oil and natural gas exploration also fragment existing grasslands and increase road traffic and access by humans. Impacts of this type of disturbance on Swift Foxes are unknown, but both positive and negative effects may be expected. On the positive side, prey abundance for Swift Foxes may increase in the vicinity of roads. However, loss of local habitat, increased mortality due to road kills, trapping and accidental shooting may also result (Carbyn et al. 1994).

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

Reptile species: Direct effects to the BLM sensitive reptile species could include injury or mortality as a result of construction, production, and maintenance activities. These effects would be most likely during the active season for these species, which is generally April to October. Indirect effects could include a greater susceptibility to predation if the road or pad is used to aid in temperature regulation. Overall, however, there is a low likelihood that these species would be substantially affected.

American White Pelican: Direct effects would likely be during the development phase, when consistent industry activity could exclude pelicans from some nesting and foraging habitat. However, the stipulations attached the lease parcels that may affect white pelican habitat offer the protection needed to protect this BLM sensitive species. The protective stipulation CO-17 is a timing limitation to protect white pelican nesting and feeding habitat. Parcel 6363 and 6522 contain white pelican nesting and feeding habitat as mapped by CPW.

Northern goshawk: Goshawk nests could potentially occur in any parcel that involves mature pinyon-juniper, mixed conifer, or aspen woodlands. The combination of expanded NSO and TL

lease stipulations minimize or avoid adverse modification of nesting habitat. 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 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. Raptors are protected by a suite of stipulations (CO-03, CO-18, and RG-05) that require no surface occupancy within one-eighth of a mile of nests and a timing limitation to protect raptor nesting and fledgling habitat.

Ferruginous Hawk: While the footprint of individual oil and gas wells is minimal relative to other energy developments, the total habitat lost to the network of wells and connecting roads can be considerable in areas undergoing full-field development. The potential for oil and gas related disturbance of nesting, foraging or roosting raptors arises not only from new well installation activities, including road and pad construction, drilling and equipment installation over the course of several weeks to months, but also from continual servicing and maintenance of wells over their production lifetime. Raptors are protected by a suite of stipulations (CO-03, CO-18, and RG-05) that require no surface occupancy within one-eighth of a mile of nests and a timing limitation to protect raptor nesting and fledgling habitat.

Bald eagle: Bald eagle foraging and nesting is dispersed and opportunistic across the entire RGFO area, with most activity centered near major riparian and reservoir areas. Surface disturbing activities that have potential to disrupt important bald eagle seasonal use activities are subject to NSO and TL provisions established in the Royal Gorge RMP. These stipulations have been successful in protecting ongoing nest efforts and maintaining the long term utility of roost and nest sites in the resource area.

Throughout the lease area there are many activities currently occurring, along with historic impacts, which affect wildlife resources. These activities include: oil and gas development, residential development, grazing, agriculture, mining and recreation. While the leasing of parcels will not compound these impacts, future oil and gas development may impose deleterious effects. Every parcel is unique and cumulative impacts will need to be thoroughly addressed in the development and APD stage. Stipulation CO-04 is a no surface occupancy stipulation to protect bald eagle roosts and nests and stipulation CO-23 is a timing limitation to protect winter roost sites. The following parcels contain mapped bald eagle habitat: 6333, 6350, 6353, 6374, 6388, 6484, 6485, 6486, 6488, 6496, 6499, 6515, 6521, 6522, and 6538.

Protective/Mitigation Measures: All lease parcels are stipulated, CO-34, to potentially contain habitat for threatened, endangered or other special status plant or animal (TES) providing the opportunity to apply future restrictions on development if a TES species and/or its habitat is found on the parcel or if listing status of a current species changes. Individual parcels have been

stipulated appropriately with provisions found within respective RMPs to protect species that are currently listed or deemed sensitive (Attachment C). Stipulations are described in detail in Attachment D.

As a condition of approval at the development phase, a survey for Gunnison's and black-tail prairie dog and burrowing owls must be conducted were potential habitat exists. If this species is located, BLM may require that drilling operations be moved up to 200 meters to mitigate conflicts.

Cumulative Impacts: Throughout the lease area there are many current and historic activities that affect wildlife resources. These activities include: oil and gas development within private resources, residential development, grazing, agriculture, mining and recreation. While the leasing of parcels will not compound these impacts, future oil and gas development may impose deleterious effects. Every parcel is unique and cumulative impacts will need to be thoroughly addressed in the development and APD stage.

Preferred Alternative:
Direct and Indirect Impacts: The impacts of leasing the parcels under the Preferred Alternative would be similar to the Proposed Action; however the removal of parcels in Park County would further protect threatened, endangered, and sensitive species in South Park.

Protective/Mitigation Measures: Future Conditions of Approval, and BLM directives at the APD stage is adequate to protect threatened, endangered, and sensitive species on the parcels being proposed for leasing.

Cumulative Impacts: Cumulative impacts of the Preferred Alternative would be similar to the Proposed Action.

No Action Alternative:
Direct and Indirect Impacts: If these lands are not leased for oil and gas development, no new impacts to threatened, endangered or sensitive species would occur; however it is likely that development would still continue on adjacent private lands.

Protective/Mitigation Measures: None

Finding on the Public Land Health Standard for Threatened & Endangered species: The proposed action will not result in change to the physical environment; therefore, this action will not jeopardize any special status wildlife habitat or species on site. Any APD approved by the BLM on leased parcels in the future should contain the necessary COAs and BMP stipulations to continue meeting the public land health standard.

3.3.3 Vegetation (includes a finding on Standard 3)

Affected Environment: The proposed lease parcels are scattered across a wide area of eastern Colorado. The project area is historically short grass prairie that has been disturbed by long term livestock grazing and/or other agricultural practices. Common grasses include Needle and thread, prairie june grass, blue grama, galleta, three awn, ring muhly, and alkali sacaton. It is likely that the native plant community has been altered due to the long-term agricultural practices in the project area.

Environmental Effects

Proposed Action:

Direct and Indirect Impacts: Generally oil and gas development involves complete removal of vegetation and at times re-contouring of the landscape to allow for resources to be retrieved. The type of ground activity associated with oil and gas development does result in increased susceptibility to adverse impacts such as soil compaction, weed infestations and erosion (See Soils and Invasive, Non-Native Species sections). Due to these adverse impacts, establishment of native vegetation similar to adjacent undisturbed vegetation can take up to 30 years.

Cumulative Impacts: No determination regarding cumulative impacts can be made at the leasing stage. Cumulative impacts will be determined when site specific analysis is addressed at the APD stage.

Mitigation/Residual Effects: Proposed mitigation measures, including reclamation practices, would be developed upon environmental analysis of a site specific APD.

Preferred Alternative:

Direct and Indirect Impacts: The impacts of leasing the parcels under the Preferred Alternative would be similar to the Proposed Action; however the removal of parcels in Park County would further protect vegetation in South Park.

Protective/Mitigation Measures: Future Conditions of Approval, and BLM directives at the APD stage is adequate to protect vegetation on the parcels being proposed for leasing.

Cumulative Impacts: Cumulative impacts of the Preferred Alternative would be similar to the Proposed Action.

No Action Alternative:

Direct and Indirect Impacts: None.
Cumulative Impacts: None.
Mitigation/Residual Effects: None.

Finding on the Public Land Health Standard for Plant and Animal Communities:
The project area was assessed for Standards for Public Land Health. Results vary from one parcel to another but for the most part the parcels are meeting public land health standards. The impacts related to the proposed action can be mitigated thru the proper implementation of a reclamation plan created in a site specific APD.

3.3.4 Wetlands & Riparian Zones (includes a finding on Standard 2)

Affected Environment: Parcels offered for lease under this action relative to wetlands or riparian resources fall into three broad categories: 1) Flat upland topography with little overland flow, no wetlands present and no well-defined drainages on the parcel: 2) predominantly upland, but may intercept ephemeral, intermittent, or rarely small perennial drainages that may possess riparian habitat. In association with these, constructed collection basins may occur to store precipitation primarily for livestock. Riparian habitat may exist because of the stored water or seeps, but parcels drainages are relatively dry and 3) parcels within or that contain portions of waterways where open water, wetlands, or some wetland transition zone is present.
Parcels under this action are in eastern Colorado or Park County. Lease parcels are primarily in smaller watersheds tributary to the Arkansas River. Other parcel clusters are within the South Platte basin including headwaters areas of South Park. Some are in watersheds that drain into Kansas (Kit Carson and Cheyenne Counties). Precipitation in much of eastern Colorado generally does not yield perennial flowing streams with associated wetland development until watershed area becomes rather large or impoundment of seasonal water has occurred. Parcels along the Arkansas main stem and Purgatory Rivers however are supported by high elevation Colorado snowpack, with reservoirs and headwater diversion allowing for extended saturation conditions and wetlands to establish. Playa environments exist on the landscape in vicinity or on some parcels. Playas in eastern Colorado are generally infrequently full so they do not generally alter land use practices and are often grazed or tilled similar to surrounding uplands. Playa areas however were identified because during extensive precipitation, wetlands characteristics can develop and because of the unique seasonal habitat they provide. Lease parcels occur across different counties yielding varying habitat types and land uses. When leases occur on split estate parcels, BLM generally lacks site specific inventory for the purposes of characterizing resources. In those instances, BLM evaluates various information sources to determine wetland potential. BLM makes wetland predictions though GIS analysis of stream courses, vegetation, drainage area, etc. Aerial photography interpretation in combination with field verification is also used. When potential wetlands are suspected, stipulation CO-28 is applied to the parcel which alerts of possible wetland or riparian resources where BLM may restrict development location. Riparian protection stipulations are added to individual parcels, or portions of, when waterways, streams, arroyos, wetlands, ponds, playas, reservoirs, etc. are believed likely to exist. It is possible wetland areas within a drainage network are not present due to drought conditions, past

disturbance, etc., but without longer term evaluation, wetland protection is prudent. Disturbed wetlands in marginal areas can recover through wet periods disrupting analysis accuracy so potential areas are protected by stipulation. Stipulations may be relaxed on some parcels at a later date.

Environmental Effects

Proposed Action:
Direct and Indirect Impacts: Leasing does not subject wetland resources to direct impact. Potential drilling and infrastructure development however can at a later time. Change to upland runoff from vegetation disturbance at roadways, drill pads, etc. can result in accelerated erosion and sediment deposition into water ways and generally is the primary impact, but wetland obligate wildlife species disturbance could also occur. With the CO 28 stipulation attached to certain parcels where wetland conditions are encountered, infrastructure would be moved to minimize or eliminate impacts. Land use has often greatly modified Colorado's wetland resource potentials; however locating development infrastructure away from riparian resources reduces or alleviates additional modification.
Cumulative Impacts: Regional variation in land uses occurs in the counties where leases are proposed. Disturbance varies from minimal on parcels near some headwater regions to extensive with changes coming from agricultural, plowing, irrigation and others activities. On certain parcels, post lease development would be intrusive in proximity to riparian areas and wetlands. In other locations, development would be masked, or cumulative to extensive agricultural activities within modified drainage-ways. Cumulative impact analysis at the scale and stage of the lease is less meaningful than at the APD stage if a parcel is leased and development plans move forward.
Protective/Mitigation Measures: At the APD stage, RGFO will need to evaluate if location stipulations are sufficient by themselves to protect wetland resources or if in addition to location modification, are other protective measures are necessary. RGFO will need to incorporate appropriate oil and gas development BMP's to limit and buffer overland runoff from being accelerated into drainages.

Preferred Alternative:
The direct and indirect effects of the Preferred Alternative on riparian and wetland resources would be similar to those described under the Proposed Action, however with the elimination of lease and potential post development effects on deferred parcels in the South Park region, impacts within that region are eliminated. Development under the Preferred Alternative would be less than under the Proposed Action and therefore impacts would be proportionately reduced.

No Action Alternative:
Direct and Indirect Impacts: Not leasing these parcels limits development in areas discussed as having potential wetland resources, however development could still occur adjacent where

federal mineral rights are not involved. Generally however, wetland and riparian resources on the parcels listed would stay in their existing condition, but due to split estate private land surface, long term future conditions will be subject to the land use implemented by owners.
Cumulative Impacts: No additional cumulative impacts to eastern Colorado riparian resources.
Protective/Mitigation Measures: None

Finding on the Public Land Health Standard for Riparian Systems: No public land riparian habitat conditions would be substantially altered by leasing these parcels given stipulation to locate future wells and development accordingly.

3.3.5 Wildlife Aquatic (includes a finding on Standard 3)

Affected Environment: See also Wetland and Riparian discussion above. These lease parcels are primarily in smaller watersheds within Arkansas River tributaries within the RGFO. Other parcel clusters are within the South Platte basin including headwater areas within South Park. Some are in watersheds that drain into Kansas (Kit Carson and Cheyenne Counties). Which watershed, the habitat type present, aquatic species that may have been previously introduced, elevation, and other variables determine the aquatic species composition in proximity to a particular lease parcel. Parcels however are generally upland with only small drainages dividing upland areas. Frogs, toads, salamanders and some aquatic turtles (varies with location) are more likely to be near lease parcels than fish due to general intermittent conditions except for the Arkansas River main-stem where either could occur. Parcels with defined intermittent or perennial drainages receive riparian protective stipulation to locate drilling away from wetlands and generally eliminate overlap between aquatic environments and exploration or development. Ephemeral channels can also receive protection if determination is not conclusive whether wetlands or seasonal aquatic habitat could be supported periodically. Drier drainages can form wetland characteristics (and aquatic habitat) during wet cycles over several years and infrequent wet areas can be important to certain aquatic wildlife species. Some lease parcels are adjacent to playas and can yield similar infrequent but important habitat.

Environmental Effects

Proposed Action:

Direct and Indirect Impacts: The lease sale action does not subject aquatic habitat resources or aquatic wildlife species to any direct impact. Potential well pad and infrastructure modifications related to field development at a later stage could directly or indirectly affect habitats on some parcels. Generally, affects are limited to change in upland area runoff due to vegetation disturbance and from roadways, drill pads, etc. which can result in accelerated erosion and deposition of sediments into water ways affecting aquatic habitat. With the CO-28 stipulation attached to certain parcels then at development stage where riparian or wetland aquatic habitat conditions are encountered, pad location would be moved to minimize or eliminate impacts.

Parcels along the Arkansas River will have an NSO (no-surface occupancy) stipulation. Drilling will not occur in the river as a result of this restriction. Other non-oil and gas related land uses have often previously modified many eastern Colorado aquatic resource potentials from native, or functional conditions, but locating infrastructure away from aquatic habitat serves to limit additional modification. Information for aquatic wildlife species presence, by drainage, or within certain areas is available and was used to determine relative risk of impact to any single species at a specific parcel location. No individual parcel or cluster of parcels is known to overlap or interact with an isolated species found only in limited regional area. Leasing of the parcels will not directly affect aquatic wildlife on any parcel. Stipulation CO-28 will allow for location of future develop to be located away from aquatic resources where federal mineral overlap occurs.

Cumulative Impacts: Historic aquatic habitat modifying land uses vary from minimal to extensive resulting from grazing, agricultural modification, irrigation, reservoirs affects, and other modification. Certain parcels post lease development would be intrusive where development would be noticeable altering disturbance regimes near to riparian areas. In other locations, development would be masked by extensive agriculture, etc, occurring within modified drainage-ways or in proximity to other oil and gas development. Cumulative impact analysis at the scale and stage of the lease is less meaningful than at the APD stage if a parcel is leased and development plans move forward.
Protective/Mitigation Measures: Mitigation/Residual Effects: At the APD stage, RGFO will need to evaluate if development location stipulation are sufficient to protect aquatic resource, or if small aquatic habitats not located by remote sensing exist and require protection. Environmental analysis then will also show if in addition to location modification stipulation (CO-28), are additional protective measures necessary. Additional protective BMP's would be incorporated to development designs.

Finding on the Public Land Health Standard for Plant and Animal Communities:
No aquatic species community would be substantially altered by leasing these parcels. With the stipulation to locate future wells accordingly and further NEPA review pending, the action is not likely to alter the composition of any aquatic wildlife community.

Preferred Alternative:
The direct and indirect effects of the Preferred Alternative on aquatic wildlife, aquatic habitat, riparian and wetland resources would be similar to those described under the Proposed Action, however with the elimination of lease and potential post development affects on deffered parcels in the South Park region, impacts within that region are eliminated. Development under the Preferred Alternative would be less than under the Proposed Action and therefore impacts would be proportionately reduced.

No Action Alternative:

Direct and Indirect Impacts: Not leasing the parcels prevents development discussed as having potential impact in the proposed action. Generally, aquatic habitat resources on the parcels stay in their existing condition, but due to the extensive amount of split estate, will be subject to the land uses determined as suitable by land owners.
Cumulative Impacts: No additional cumulative impacts to eastern Colorado resources
Protective/Mitigation Measures: none

3.3.6 Wildlife Terrestrial (includes a finding on Standard 3)

Affected Environment: The eastern plains of Colorado and portions of South Park, Colorado contain flat to gently rolling topography, with occasional canyons and bluffs. The dominant habitat in this physiographic area is shortgrass prairie. Shortgrass is dominated by two low-growing warm-season grasses, blue grama and buffalo grass; western wheatgrass is also present, along with taller vegetation including widespread prickly-pear cactus and yucca, and cholla in the south. Sandsage prairie is found where sandy soils occur, and is dominated by sand sagebrush and the grasses sand bluestem and prairie sand-reed. Mixed grass (needle-and-thread, side-oats grama) and tallgrass (big bluestem, little bluestem, switchgrass) communities occur locally.

A second habitat in this physiographic area is lowland riparian. In the shortgrass prairie, lowland riparian habitats occur along the few stream and river courses. Riparian vegetation is dominated by plains cottonwood, willow shrubs, and introduced species such as Russian-olive and Chinese elm. Trees were uncommon features of the shortgrass prairie before European settlement; development of woody vegetation has been facilitated in historical times by alteration of natural river flow regimes, a result of irrigation drawdown and reservoir construction for flood control.

Several of the lease parcels on the eastern plains serve as winter range for pronghorn antelope and mule deer (6305, 6306, 6307, 6308, 6324, 6363, 6373, 6374, 6378, 6411, 6412, 6413, 6484, 6486, 6487, 6488, 6501, and 6512). A species winter range is defined as that part of the overall range where 90 percent of the individuals are located during the average five winters out of ten from the first heavy snowfall to spring green-up, or during a site specific period of winter as defined for each Colorado Parks and Wildlife data analysis unit.

Few raptor nest locations are known within the proposed lease parcels because of a lack of suitable nesting substrate and/or a lack of information due to the fact that many parcels are located on private surface.

Several parcels were located in Colorado Natural Heritage Program (CNHP) Potential Conservation Areas (PCAs). A PCA may include a single occurrence of a rare element or a suite of rare elements or significant features. The goal is to identify a land area that can provide the

habitat and ecological processes upon which a particular element or suite of elements depends for their continued existence. The best available knowledge of each species' life history is used in conjunction with information about topographic, geomorphic, and hydrologic features, vegetative cover, as well as current and potential land uses. The proposed boundary does not automatically exclude all activity. Consideration of specific activities or land use changes proposed within or adjacent to the preliminary conservation planning boundary should be carefully considered and evaluated for their consequences to the element on which the conservation unit is based. Affected PCAs include Adobe Creek Basin, Arkansas River, Central Arkansas Playas, Central Shortgrass, Comanche Grassland, Horse Creek-Lincoln County, Pawnee Grassland East, Plum Creek, Purgatoire Canyon, Purgatoire Prairie, South Park, South Platte River, and Trout Creek.

Environmental Effects

Proposed Action:

Direct and Indirect Impacts: However, leasing parcels for oil and gas development will likely result in future development at some locations. At this time, the speculative nature of this process does not allow for specifics of development to be known; therefore, impacts to terrestrial wildlife caused by development remain unknown. If a parcel is leased and development occurs, impacts likely to occur will be habitat loss and fragmentation (well pad construction, road construction, etc.). Wildlife could avoid preferred habitat because of human presence, noise from drilling and production facilities, increased road density and traffic. Sawyer et al. (2006) demonstrated an avoidance response by mule deer of well pads and roads in the development of a natural gas field in western Wyoming. The response was immediate (i.e., year 1 of development) and no evidence of acclimation occurred during the course of the 3 year study. However, the indirect habitat loss caused by an avoidance response of mule deer could be reduced by 38-63% with the use of advanced technologies and proper planning that minimize the number of well pads and amount of human activity associated with them (Sawyer et al. 2006). Elk have displayed similar avoidance characteristics as mule deer to oil and gas development. Radio collared elk in the Jack Marrow Hills, Wyoming displayed an avoidance buffer of 1000-m in winter and 2000-m in summer of roads and active well sites (Powell 2003). While habitat between the well sites in the studies listed above and the parcels in the RGFO lease sale may not be equal, a general assumption can be made that oil and gas development activities could alter habitat use of these terrestrial animals.

Raptors are protected by a suite of stipulations (CO-03, CO-18, and RG-05) that require no surface occupancy within one-eighth of a mile of nests and a timing limitation to protect raptor nesting and fledgling habitat. This control method allows the protection of known active nest sites during the APD phase. While the footprint of individual wells is minimal, the total habitat lost to a network of wells and connecting roads can be considerable. The potential for oil and gas related disturbances of nesting, foraging and roosting raptors arises not only from new well

installation activities, including road and pad construction, drilling, and equipment installation over the course of several weeks to months, but also from continual servicing and maintenance of wells over their productive lifetime.

Several lease parcels are located within PCAs; however, the RGFO RMP and the North East RMP contain a suite of stipulations that will protect the elements outlined in each PCA in the event that leased parcels are eventually developed.

The uniqueness of each parcel requires a multitude of stipulations for leasing. Leasing stipulations have been appropriately attached (Attachment C) to protect and mitigate for valuable wildlife habitats (e.g. big game winter range (CO-09)). A detailed explanation of leasing stipulations can be found in Attachment D.

Protective/Mitigation Measures: A standard condition of approval (COA) would include no developments activities will be allowed to occur on any state wildlife areas, or state habitat areas to protect the unique wildlife habitat characteristics that occur within the boundaries of these properties. Additional COA and requirements will likely be attached during the APD and development stage.

Because of the lack raptor nesting information and the lease stipulations attached to each parcel a standard COA would require a raptor nest survey where habitat existed. If a nest were found, the stipulations would require the lessee to maintain the integrity of site characteristics for existing nests. Additionally, timing limitations will reduce disruption of adult attendance at each known occupied nest location.

Cumulative Impacts: Throughout the lease area there are many current and historic activities that affect wildlife resources. These activities include: oil and gas development, residential development, grazing, agriculture, mining and recreation. While the leasing of parcels will not compound these impacts, future oil and gas development may impose deleterious effects. Every parcel is unique and cumulative impacts will need to be thoroughly addressed in the development and APD stage.

<u>Preferred Alternative</u>:
Direct and Indirect Impacts: The impacts of leasing the parcels under the Preferred Alternative would be similar to the Proposed Action; however the removal of parcels in Park County would further protect terrestrial wildlife species in Park County.

Mitigation/Residual Effects: Future Conditions of Approval, and BLM directives at the APD stage is adequate to protect wildlife resources on the parcels being proposed for leasing.

Cumulative Impacts: Cumulative impacts of the Preferred Alternative would be similar to the Proposed Action.

No Action Alternative:
Direct and Indirect Impacts: If these lands are not leased for oil and gas development, no new impacts to wildlife resources would occur; however it is possible that development could still continue on adjacent private lands.

Protective/Mitigation Measures: None.

Finding on the Public Land Health Standard for Plant and Animal Communities: The proposed action will not result in a change to the physical environment; therefore, this action will not jeopardize any wildlife habitat or species on site. Any APD approved by the BLM on leased parcels in the future should contain the necessary COAs and best management practices to continue meeting the public land health standard.

3.3.7 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 eastern plains of Colorado and portions of South Park, Colorado contain flat to gently rolling topography, with occasional canyons and bluffs. The dominant habitat in this physiographic area is shortgrass prairie. Shortgrass is dominated by two low-growing warm-season grasses, blue grama and buffalo grass; western wheatgrass is also present, along with taller vegetation including widespread prickly-pear cactus and yucca, and cholla in the south. Sandsage prairie is found where sandy soils occur, and is dominated by sand sagebrush and the grasses sand bluestem and prairie sand-reed. Mixed grass (needle-and-thread, side-oats grama) and tallgrass (big bluestem, little bluestem, switchgrass) communities occur locally.

A second habitat in this physiographic area is lowland riparian. In the shortgrass prairie, lowland riparian habitats occur along the few stream and river courses. Riparian vegetation is dominated by plains cottonwood, willow shrubs, and introduced species such as Russian-olive and Chinese elm. Trees were uncommon features of the shortgrass prairie before European settlement; development of woody vegetation has been facilitated in historical times by alteration of natural river flow regimes, a result of irrigation drawdown and reservoir construction for flood control.

The following birds are listed on the US Fish and Wildlife Service Birds of Conservation Concern (BCC) – 2008 List for BCR 16-Southern Rockies/Colorado Plateau and BCR 18-Shortgrass Prairie. These species have been identified as species that may be found in the project area, have declining populations and should be protected from habitat alterations.

The golden eagle is a bird of grasslands, shrublands, pinyon-juniper woodlands, and ponderosa pine forests, may occur in most other habitats occasionally, especially in winter. Nests are placed on cliffs and sometimes in trees in rugged areas, and breeding birds range widely over surrounding habitats.

Flammulated owls prefer old-growth or mature ponderosa pine, apparently due to the presence of large broken-top and lightning-damaged snags and trees for nesting cavities, large cavities excavated by Northern Flickers and other woodpeckers, open structure of trees and under story for foraging, and high prey availability. They will utilize other habitats with similar structure, such as open mixed-conifer and aspen forests. Key habitat features seem to be the presence of large trees and snags, scattered clusters of shrubs or saplings, clearings, and a high abundance of nocturnal arthropod prey.

Northern harrier's reside throughout Colorado, with highest densities on the eastern plains, mountain parks, and western valleys. These hawks feed on small mammals, birds, reptiles, and amphibians. They hunt by flying low over wetlands, grasslands, shrublands, and croplands.

Peregrine falcons in Colorado breed on cliffs and rock outcrops from 4,500-9000 ft in elevation. They most commonly chosen cliffs lie within pinyon-juniper and ponderosa pine zones. These falcons feed on smaller birds almost exclusively, with White-throated swifts and rock doves being among their favored prey.

Prairie falcons nest in scattered locations throughout the state where they inhabit the grassland and cliff/rock habitat types. These falcons breed on cliffs and rock outcrops, and their diet during the breeding season is a mix of passerines and small mammals.

Williamson's sapsuckers breed in forested regions and in Colorado populations are concentrated along the eastern edge of the Rockies. Williamson's sapsuckers nest primarily in ponderosa pine and in aspen components of mixed-conifer. They often place nest cavities in aspen trees, and often choose nest trees in aspen stands adjacent to open ponderosa pine or mixed-conifer forest.

The Gray vireo nests in western Colorado and on the eastern slope of Las Animas County. Gray Vireos are pinyon-juniper woodland obligates. Gray Vireos usually inhabit stands dominated by juniper or thin stands of pure juniper. They construct nests of dry grasses, plant fibers, stems, and hair, often camouflaging them with sagebrush leaves.

Black-throated gray warblers are fairly common summer residents in pinyon-juniper woodlands across the southwestern half of Colorado. Some surveys show these warblers to be the most frequently encountered birds in the pinyon-juniper woodland. Black-throated gray warblers, in Colorado, are pinyon-juniper obligates, preferring tall, dense pinyon-juniper woodlands.

Virginia's warblers in Colorado nest between 5,000 and 9,000' elevation. They breed most abundantly in the western quarter of the state, along the eastern slope foothills, and in the Upper Arkansas River drainage. Virginia's warblers nest in dense shrublands and on scrub-adorned slopes of mesas, foothills, open ravines, and mountain valleys in semiarid country. They use scrubby brush, pinyon-juniper woodland with a well-developed shrubby understory, ravines covered with scrub oak and dense shrublands--especially Gamble's oak. They also breed in open ponderosa pine savannahs that have a dense understory of tall shrubs.

Grace's warblers breed from southwestern Colorado and southern Utah, south through central Arizona, western New Mexico, and into north-central Mexico. Grace's warblers inhabit open ponderosa pine forests with pines 16 ft tall, especially with a shrubby understory, usually Gamble's oak.

Environmental Effects

Proposed Action:

Direct and Indirect Impacts: The act of leasing will have no impact on migratory birds (populations or individuals). However, leasing may lead to future development which may include the building roads and pads, drilling wells, installation of pipelines, open pits of produced liquid, etc. The following describes potential impacts if development were to occur. If an open pit is to be used for produced water, petroleum based products that accumulate on the surface will result in death of migratory birds. The eastern plains of Colorado are relatively dry, and open water pits can draw migratory birds. If a bird where to use this water source to rest, feed, preen, or drink from petroleum products would likely coat the bird causing it to lose its buoyancy, flight, and insulating capabilities resulting in death. Ingestion of petroleum products could also be lethal. Migratory birds may be burned or killed by exhaust vents, heater-treaters, flare stacks, etc., if perched at the opening while in operation. An increase of activity, i.e. road traffic, will likely result in an increase in vehicular collisions with migratory birds.

Protective/Mitigation Measures: To be in compliance with the Migratory Bird Treaty Act (MBTA) and the Memorandum of Understanding between BLM and USFWS required by Executive Order 13186, BLM must avoid actions, where possible, that result in a "take" of migratory birds. Generally this is a seasonal restriction that requires vegetation disturbance be avoided from May 15 thru July 15. This is the breeding and brood rearing season for most Colorado migratory birds.

While no leasing stipulations exist that apply directly to migratory birds, the following conditions of approval are attached to APD's to prevent the take of migratory birds. All open pits will be fenced and netted in a manner to exclude migratory birds until all liquid is absent and backfilling has been initiated. Any secondary containment system will be covered in a manner to prevent access by migratory birds. The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, and in-line units. Any action that may result in a "take" of individual migratory birds or nests that are protected by MBTA will not be allowed.

Cumulative Impacts: Throughout the lease area there are many activities currently occurring, along with historic impacts, which affect wildlife resources. These activities include: oil and gas development, residential development, grazing, agriculture, mining and recreation. While the leasing of parcels will not compound these impacts, future oil and gas development may impose deleterious effects. Every parcel is unique and cumulative impacts will need to be thoroughly addressed in the development and APD stage.

Preferred Alternative:
Direct and Indirect Impacts: The impacts of leasing the parcels under the Preferred Alternative would be similar to the Proposed Action; however the removal of parcels in Park County would further protect migratory bird species in South Park.

Mitigation/Residual Effects: Future Conditions of Approval, and BLM directives at the APD stage is adequate to protect migratory bird resources on the parcels being proposed for leasing.

Cumulative Impacts: Cumulative impacts of the Preferred Alternative would be similar to the Proposed Action.

No Action Alternative:
Direct and Indirect Impacts: If these lands are not leased for oil and gas development, no new impacts to wildlife resources would occur; however it is possible that development could still continue on adjacent private lands.

Protective/Mitigation Measures: None.

3.4 HERITAGE RESOURCES AND HUMAN ENVIRONMENT

3.4.1 Cultural Resources

Affected Environment: **Paleo-indian** sites are scarce in the eastern half of Colorado. During the years 10,000-5500 BC, Paleo-indian populations appear to have subsisted on large game (based on associated lithic tools), and probably supplemented their diets with a variety of small game and vegetal materials. Paleo-indian materials from the Clovis period (9500-8950 BC) have been reported for southeastern Colorado, and although not extensive, Folsom and Plano artifacts seem to suggest an increase in population through time. It appears that Paleo-indian populations were living in relatively small groups, and seem to have been mostly nomadic.

Many more cultural materials dating to the **Archaic** period (5500 BC-AD 500) have been found. The general size reduction of lithic tools, coupled with the presence of groundstone and vegetal evidence, suggests that a gradual shift in subsistence from large game to smaller game and possible horticulture was taking place. As early as 7800 BP, Archaic populations were living in pithouses, and, later, in structures with stone foundations. Based on these and other data, it appears that Archaic groups were sedentary to some extent.

Evidence of the **Formative and Late Prehistoric/Proto-historic** periods (AD 500-1600) occupations is spotty in the mountain region. While some scholars interpret data from these periods as representing a clearly defined "mountain formative culture", the majority still believe that the mountains were inhabited seasonally by Plains-oriented groups. However, there is little to indicate substantial Formative or Late Prehistoric/Proto-historic settlement in the mountains, most likely due to a nomadic lifestyle.

The appearance of pottery and stemmed, corner-notched projectile points in the archaeological record suggest a change in culture in the Colorado Plains around AD 100. The **Late Prehistoric** (AD 100-1725) was a time when aboriginal populations in eastern Colorado seemed to have adopted a more sedentary lifestyle than in previous times. The construction of complex structural sites, the adoption of pottery and the increased dependence on horticulture (in the southeastern Plains) are all suggestive of less mobility.

Sites dating to the protohistoric period (beginning with the **Diversification Period**, AD 1450-1725) are difficult to identify. In southeastern Colorado, sites of that time period are dated based on the presence of “Apachean” traits, like pottery, rock art, and stone circles. In northeastern Colorado, the Dismal River Aspect (AD 1525-1725) is distinguished by shallow pithouses, bell-shaped roasting pits, and by Dismal River Gray Ware ceramics.

The **Proto-historic** was a time of increasing population movement, and was further complicated by the arrival of the Spanish, and, later, the Euro-Americans. Starting in 1725, and continuing until they were entirely eliminated by the 1870s, Native American groups identified as the Plains, Jicarilla, and Kiowa Apaches; the Utes; the Arapaho; the Comanches; the Cheyennes; and occasionally the Crow, Shoshoni, and the Blackfeet, were known to occupy the Plains region.

Europeans first explored southeastern Colorado in 1540. By 1822, Spanish dominance of the area ended. The Santa Fe Trail was established that year, bringing American populations into the region. Commercial ranching commenced in the 1860s, and the Homestead Act of 1862 increased the population further. By 1870, all Native American groups had been subdued, following several decades of violence. Buffalo hunting, popular among Euro-Americans in the early 1800s, finally decimated any remaining animals by 1880. After 1900, sugar beet production and dryland farming and ranching were the dominant industries in the area. The Great Depression of 1929 and the Dust Bowl of the 1930s combined to cause severe problems for agriculturalists. By 1941, programs created by the Roosevelt administration and the industrial needs resulting from the U. S. entry into World War II had greatly improved the economy. Agriculture continues to predominate as the largest revenue-producing industry in eastern Colorado.

Environmental Effects

Proposed Action:

Direct and Indirect Impacts: BLM conducted a literature review of records in the BLM-RGFO field office and database, and reviewed relevant information in the Compass database maintained by the Colorado Office of Archaeology and Historic Preservation. The records indicate that 28 inventories for cultural resources have been completed on the proposed lease parcels. The 1228 acres included in the inventories represents about .02% of the total proposed acreage. Of the 13 phenomena (sites and isolated finds, or "IFs") recorded during the inventories, 3 are either listed on or eligible for the National Register of Historic Places (NRHP).

The five prehistoric phenomena include individual artifacts, lithic concentrations and rock art. The remaining eight include historic era bridges and underpasses, a highway segment, a historic ranch, a possible segment of the Santa Fe Trail, historic trash scatters, and the Granada Relocation Center (aka Amache).

In 2006, the Granada Relocation Center (Amache) was designated a National Historic Landmark ("NHL"). Parcel 6355 includes five tracts of land, two of which are within the boundary of the NHL. In order to avoid affecting this highly significant historic property, the two tracts located in T23S R44W, Section 14, should be dropped. However, consultation with the National Park Service (NPS) confirmed that the three remaining tracts that comprise Parcel 6355 (T23S R44W, Sections 9, 15 and 21) are not within the boundary of the NHL, nor are they part of the original

outlying agricultural lands that were farmed by the inmates of the relocation camp. The NPS concurred with BLM's conclusion that it is not necessary for the tracts in Section 9, 15 and 21 to be dropped.

BLM also consulted with the NPS regarding the possible presence of a segment of the Santa Fe Trail, a National Historic Trail, on Parcel 6499. Because the USGS topographic map illustration of the "approximate route" of the trail bisects the parcel, it was necessary to perform field verification, which proved to be negative. The NPS concurred with BLM's determination that the proposed lease parcel will not affect the Santa Fe Trail.

Because the proposed lease sale does not involve ground disturbance, the proposed undertaking will have no effect on historic properties. The SHPO was consulted regarding this determination, and had no objection. Any future development of parcels that are purchased as a result of the lease sale will be subject to additional Section 106 compliance, including identification, effects assessment, consultation, and if necessary, resolution of adverse effects (see Exhibit CO-39).

Preferred Alternative: Same as proposed action.

No Action Alternative: Same as proposed action.

Cumulative: None.

3.4.2 Paleontological Resources

Affected Environment:
Occurrences of paleontological resources are closely tied to the geologic units that contain them. The probability for finding paleontological resources can be broadly predicted from the geologic units present at or near the surface. Using the Potential Fossil Yield Classification (PFYC) system, geologic units are classified base on the relative abundance of vertebrate fossils or scientifically significant invertebrate or plant fossil and their sensitivity to adverse impacts, with a higher class number indicating higher potential (WO IM2008-009).

Almost all of the proposed lease sale parcels contain geologic formations that are classified as PFYC 3 to PFYC 5 formations that have a moderate to likely potential of containing significant paleontological resources that could potentially be impacted by activities associated with oil and gas leasing. The formations affected, their known fossil types, and their PFYC values are as follows (Tweto 1979, BLM Colorado State Office PFYC chart):

Formation	Fossil Types	PFYC
Cretaceous Colorado Group	Various invertebrates and plants	3
Cretaceous Carlisle Shale	Various invertebrates including forams and ammonites	3
Cretaceous Purgatoire Formation	Vertebrate Trace Fossils	3
Cretaceous Niobrara Formation	Various invertebrates including clams, oysters, baculites, scaphites, burrows, and cephalopods	3
Cretaceous Pierre Shale—Lower Unit	Various	3
Cretaceous Pierre Shale—Middle Unit	Various	3
Cretaceous Pierre Shale—Upper Unit	Various invertebrates (cephalopods, bivalves, crustaceans)	3
Quaternary Eolian Deposits	Various	3
Quaternary Gravels and Alluviums	Mammoths	3
Tertiary Ogallala Formation	Various vertebrates, invertebrates, and wood	5
Oligocene Sedimentary Rocks	Various	5
Tertiary White River Formation	Various vertebrates, invertebrates, and wood	5

Environmental Effects

Proposed Action:

Locations for proposed oil or gas well pads, pipelines, and associated infrastructure on these parcels will be subject to further analysis for the protection of paleontological resources during APD/development stage NEPA review. Areas that contain geologic formations that are PFYC 3, 4, and 5, for which new surface disturbance is proposed on or adjacent to bedrock (native sedimentary stone) including disturbance that may penetrate protective soil cover and disturb bedrock, may be subject to an inventory that shall be performed by a BLM permitted

paleontologist and approved by the appropriate RGFO specialist. Surface disturbing activities in many areas may also require monitoring by a permitted paleontologist.

Direct and Indirect Impacts: Potential impacts to fossil localities would be both direct and indirect. Direct impacts to or destruction of fossils would occur from unmitigated activities conducted on formations with high potential for important scientific fossil resources. Indirect impacts would involve damage or loss of fossil resources due to the unauthorized collection of scientifically important fossils by workers or the public due to increased access to fossil localities on or near the lease parcels. Adverse impacts to important fossil resources would be long-term and significant since fossils removed or destroyed would be lost to science. Adverse significant impacts to paleontological resources can be reduced to a negligible level through mitigation of ground disturbing activities. It is possible that the leasing action would have the beneficial impact in that ground disturbance activities might result in the discovery of important fossil resources.

Cumulative Impacts: Cumulative impacts to paleontological resources could result from surface disturbing activities associated with potential development, when added to past, present, and reasonably foreseeable future actions, but would not be expected to contribute to cumulative impacts to paleontological resources in the lease area if protective mitigation measures are followed.

Mitigation: Mitigations will be developed during the NEPA review of individual ground disturbing activities. Typically, such mitigations include provisions for the monitoring of ground disturbance by a BLM permitted paleontologist, a requirement for the operator to inform all persons associated with the project of relevant Federal laws protecting fossil resources, and requirements regarding the disclosure of inadvertent fossil discoveries during construction or operation to the RGFO.

The following lands are likely to contain significant paleontological resources and are subject to Exhibit CO-29 that alerts the lessee of potential requirements to protect paleontological values are as follows: 6290, 6291, 6369, 6370, 6371, 6372, 6396, 6454, 6455, 6456, 6457, 6470, 6485, 6488, 6489

<u>Preferred Action</u>:
Locations for proposed oil or gas well pads, pipelines, and associated infrastructure on these parcels will be subject to further analysis for the protection of paleontological resources during APD/development stage NEPA review. Areas that contain geologic formations that are PFYC 3, 4, and 5, for which new surface disturbance is proposed on or adjacent to bedrock (native sedimentary stone) including disturbance that may penetrate protective soil cover and disturb bedrock, may be subject to an inventory that shall be performed by a BLM permitted

paleontologist and approved by the appropriate RGFO specialist. Surface disturbing activities in many areas may also require monitoring by a permitted paleontologist.

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Cumulative Impacts: Cumulative impacts to paleontological resources could result from surface disturbing activities associated with potential development, when added to past, present, and reasonably foreseeable future actions, but would not be expected to contribute to cumulative impacts to paleontological resources in the lease area if protective mitigation measures are followed.

Mitigation: Mitigations will be developed during the NEPA review of individual ground disturbing activities. Typically, such mitigations include provisions for the monitoring of ground disturbance by a BLM permitted paleontologist, a requirement for the operator to inform all persons associated with the project of relevant Federal laws protecting fossil resources, and requirements regarding the disclosure of inadvertent fossil discoveries during construction or operation to the RGFO.

The following lands are likely to contain significant paleontological resources and are subject to Exhibit CO-29 that alerts the lessee of potential requirements to protect paleontological values are as follows: 6290, 6291, 6369, 6370, 6371, 6372, 6396, 6455, 6456, 6457, 6470

<u>No Action Alternative</u>:
Under the no action alternative the proposed parcels will not be leased and therefore there would be no impacts.

Direct and Indirect Impacts: None
Cumulative Impacts: None

Mitigation/Residual Effects: None

3.4.3 Environmental Justice and Socioeconomics

Affected Environment: Executive Order 12898 requires federal agencies to assess projects to "identify and address the disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." There are no environmental justice communities in the study area, either based on race, ethnicity, or income. The areas involved in the lease sale are rural in nature, and small communities and sparsely populated subdivisions exist within variable distances from the proposed lease parcels.

Profile of County Demographics, 2000-2010

	Baca	Bent	Cheyenne	Crowley	Kiowa	Lincoln	Otero	Park	Prowers	Weld	Colorado	U.S.
Population (2010 *)	3,833	6,125	2,194	5,897	1,643	5,476	18,830	16,286	12,734	242,860	5,029,196	303,965,272
Population (2000)	4,517	5,998	2,231	5,518	1,622	6,087	20,311	14,523	14,483	180,936	4,301,261	281,421,906
Population Percent Change (2000-2010*)	-15.1%	2.1%	-1.7%	6.9%	1.3%	-10.0%	-7.3%	12.1%	-12.1%	34.2%	16.9%	8.0%

* The data in this table are calculated by ACS using annual surveys conducted during 2006-2010 and are representative of average characteristics during this period.
Data Sources: U.S. Department of Commerce. 2012. Census Bureau, American Community Survey Office, Washington, D.C.; U.S. Department of Commerce. 2000. Census Bureau, Systems Support Division, Washington, D.C.

Most of the lease parcels are located on rural farm and ranchlands. In Park County, however, there are parcels located in and adjacent to both a rural subdivision as well as a Colorado state park and wildlife areas. Parcel 6484 underlies several lots within the Red Hills Forest subdivision. The subdivision is mostly 2-3 acre lots for single family residences. Parcels 6484, 6486, 6487, 6488, and 6489 all are either adjacent to or underlie State Wildlife Areas or a state park (Spinney Mountain). This area of Park County has several stretches and reservoirs of Gold Medal fisheries, and consequently attracts a large amount of recreational use by anglers. An economic impact of nearly $16 million (adjusted from 2007 dollars) is felt in Park County due to expenditures on fishing recreation (Colorado Division of Wildlife, 2008). The vast majority of these anglers come from within the State of Colorado.

The ten-county region has experienced varying degrees of fluid mineral development. Currently the majority of oil and gas production within the Royal Gorge field office is on private mineral estate. Weld County contains the majority of current oil and gas wells within the area of impact. Employees in the oil and gas sector within these counties earn an average of approximately $70,000 per year (US Census Bureau, County Business Patterns 2010).

The following table reports the average annual fluid minerals production for each county, including an estimated revenue value, figured using the average state wellhead prices from 2009: Oil at $52.33/bbl and natural gas at $3.21/MCF (IPAA, August 2011 Report http://ipaa.org/reports/docs/2010-2011IPAAOPI.pdf). The production values are averaged over the past ten full years of production (2002-2011); (Colorado Oil and Gas Conservation Commission http://cogcc.state.co.us/).

Average Annual Production and Revenue

	Baca	Bent	Cheyenne	Crowley	Kiowa	Lincoln	Otero	Park	Powers	Weld	Total
Oil Production (Thousand bbl)	70.9	0.44	1675	0	172	156	0	0	6.5	15,019	17,100
Oil Revenue ($Thousand)	3,710	22.9	87,655	0	9,027	8,149	0	0	342	785,933	894,839
Gas Production (MMCF)	1,850	498	1,680	0	683	38.6	0	0	796	197,412	202,958
Gas Revenue ($Thousand)	5,939	1,599	5,394	0	2,192	123.8	0	0	2,555	633,692	651,495

Federal oil and gas leases generate a one-time lease bonus bid as well as annual rents. The minimum competitive lease bid is $2.00 per acre. If parcels do not receive the minimum bid they may be leased later as noncompetitive leases that don't generate bonus bids. Within the Royal Gorge field office, average bonus bids are approximately $50 per acre for oil and gas leases. Lease rental is $1.50 per acre per year for the first five years and $2.00 per acre per year thereafter. Typically, oil and gas leases expire after 10 years unless held by production. During the lease period annual lease rents continue until one or more wells are drilled that result in production and associated royalties. The royalty rate is 12.5 percent of revenue associated with mineral extraction on federal leases.

Federal mineral lease revenue for the State of Colorado is divided thusly: 48.3 percent of all state mineral lease rent and royalty receipts are sent to the State Education Fund (to fund K-12

education), up to $65 million in FY 2009 – FY 2011, and growing at four percent per year thereafter. Any amounts greater than the upper limit flow to the Higher Education Capital Fund. 10 percent of all state mineral lease rent and royalty receipts are sent to the Colorado Water Conservation Board (CWCB), up to $13 million in FY 2009, and growing at four percent per year thereafter. Any amounts greater than the upper limit flow to the Higher Education Capital Fund. 41.4 percent of all state mineral lease rent and royalty receipts are sent to the Colorado Department of Local Affairs, which then distributes half of the total amount received to a grant program, designed to provide assistance with offsetting community impacts due to mining, and the remaining half directly to the counties and municipalities originating the FML revenue or providing residence to energy employees.

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

Environmental Effects

Proposed Action:

No minority or low income populations would be directly affected in the vicinity of the proposed action.

The direct effect of the proposed action would be the payments received, if any, from the leasing of the 74,160 acres of federal mineral estate, or a subset thereof. Indirect effects that might result, should exploration and development of the leases occur, could include increased employment opportunities related to the oil and gas and service support industry in the region as well as the economic benefits to federal, state, and county governments related to lease payments, royalty payments, severance taxes, and property taxes. Other effects could include the potential for a small increase in transportation, roads and noise disturbance associated with development. These effects would apply to all public land users in the project area.

It is, however, highly speculative to predict exact effects of this action, as there are no guarantees that the leases will receive bids, that any leased parcels will be developed, or that any developed parcels will produce any fluid minerals. A rough estimate for the amount to be raised in the lease sale can be determined using recent lease sales in the field office as a guideline. Approximately 75% of all acres proposed for leasing are bid upon, with an average bid of approximately $50 per acre. Using these values, the lease sale could result in $2,728,350 in total bonus bids, though the actual amount may vary widely. To predict the results of future development would be too speculative in nature. Any APD received in would result in future NEPA analysis taking place, in which further socio-economic effects would be examined. Likewise, any negative socio-economic effects resulting from disturbance and drilling on leased parcels would also be

examined in future site-specific analysis. It is unknown when, where, how, or if future surface disturbing activities associated with oil and gas exploration and development such as well sites, roads, facilities, and associated infrastructure would be proposed. It is also not known how many wells, if any, would be drilled and/or completed, the types of technologies and equipment would be used and the types of infrastructure needed for production of oil and gas. Thus, the types, magnitude and duration of potential impacts cannot be precisely quantified at this time, and would vary according to many factors.

With regards to the lease parcels in Park County, parcel 6484, underlying parts of the Red Hills Forest subdivision, could result in some adverse impacts, specifically to the residents of the subdivision. Although it would be further examined once the specific site is proposed at the APD stage, any drilling activity within or directly adjacent to a residence would likely have adverse, though temporary, socioeconomic impacts. These would likely include impacts to noise, traffic, and aesthetics, all due to the intensive nature of the drilling and completion stages. These impacts would likely have an adverse effect on property values, depending on the proximity of the well to the property (BBC b, 2001; Thode, Stephen, 2006). However, these effects would be short-term in nature and soon after production began on the well, the site would be reclaimed to its earlier state, thereby greatly reducing the intensity of impacts to surrounding residences.

The parcels adjacent to and underlying State Wildlife Areas and a State Park will have a similar, short-term impact if leases are developed. During the drilling and completion stages, there will likely be adverse impacts, but they will become minimal once production ensues. In the short-term, if drilling occurs near popular fishing sites, anglers will likely move to other, nearby locations. Since the majority of the anglers dwell in Colorado, and alternative sites exist in the state and region for similar, high quality fishing, it is expected that there will be a minimal loss in economic impact to the state as a whole due to fishing recreation spending. Park County, as an individual county, may experience a drop in recreation-based economic impacts, but these will likely be made up by gains in neighboring counties. However, it should be kept in mind that all of these are simply possible impacts, as the exact location of wellpads has not been determined, and will be further examined at the APD stage.

Cumulative Impacts: Any possible future development of fluid mineral resources resulting from this lease sale would be in addition to the current level of development, as examined in the affected environment.

<u>Preferred Alternative</u>:
Direct and Indirect Impacts: The impacts of leasing the parcels under the preferred alternative would be similar to the proposed action; however the removal of parcels in Park County would further reduce the potential for impacts, whether positive or negative, in that region.

Cumulative Impacts: Similar to Proposed Action

Mitigation/Residual Effects: None

<u>No Action Alternative</u>:

Under the no action alternative the proposed parcels will not be leased and therefore there would be no impacts.

Direct and Indirect Impacts: None
Cumulative Impacts: None
Mitigation/Residual Effects: None

3.4.4 Visual Resources

Affected Environment:
Visual Resource Management (VRM) classes along with the corresponding VRM Objectives were established in the Royal Gorge Field Office in 1996 with the approval of the Royal Gorge Resource Area Resource Management Plan (RMP). Visual Resource Management objectives corresponding to the various management classes provide standards for analyzing and evaluating proposed projects. Projects are evaluated using the Contract Rating System to determine if it meets VRM objectives established by the RMP.

The majority of the parcels proposed for leasing occur on private surface in areas that have already been highly modified including roads, houses, and agricultural development and have not been assigned a VRM management category. Portions of parcels #6485, 6487, 6488 and 6489 are located in close proximity to Spinney Mountain State Park which is promoted as a gold medal fishery in a scenic peaceful setting. This State Park is within the area known as South Park that is characterized by wide open vistas with relatively flat to rolling terrain with dramatic mountains serving as the background. The low lying vegetation of the area lends to the open feeling and expansive views. These parcels are located in a VRM class III area where the objective is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

Photo from Colorado Parks and Wildlife website for Spinney Mountain State Park

Portions of parcels #6535, 6523 and 6524 are located in close proximity to the south shore of John Martin Reservoir State Park which is promoted as a peaceful recreation area that is close to historic landmarks.

The landscape is characterized by a relatively flat to low rolling hills landscape with lots of modifications to the human environment including railroad tracks, a dam, private residences, and recreation facilities. The vegetation is light brown to green depending upon the season and water availability. The Royal Gorge RMP did not establish VRM objectives for the parcels in this area since there is limited BLM managed surface.

Portions of parcel #6484 are in close proximity or within the viewshed of a subdivision located on Red Hill. Based on past projects residents of this subdivision have expressed concern with introducing contrasts into their viewshed. The subdivision is located on a hill amongst the relatively flat to rolling terrain characteristic of the South Park region with dramatic views of surrounding mountain ranges serving as the backdrop. These parcels are located in a VRM class III area where the objective is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

Environmental Effects

Proposed Action:

Direct and Indirect Impacts: For the areas proposed for leasing that already have high levels of human modification and are not in close proximity to recreation destinations the proposed action would introduce visual contrasts but at limited levels given the context of the project area, the level of existing development, and the use of best management practices (BMPs) if the lease were to go into production. These BMPs could include painting equipment a proper color that blends with the environment and locating facilities so they are off of ridges and not “skylined”.

Due to their proximity to Spinney Mountain State Park combined with the relatively flat to rolling terrain and low lying vegetation the leasing of portions of parcels #6487, 6488 and 6489 would most likely have limited impacts to visual resources if the parcels were to go into production. Impacts would most likely include moderate to weak contrasts in color and shape from the equipment as well as the associated roads and pads that would be mostly drowned out by the expansive view afforded to visitors utilizing the facilities at the State Park and meet the BLM Class III objectives. These impacts could be reduced through the use of appropriate colored equipment and careful use of topography in locating facilities, roads, and pads. The portions of parcel #6488 located within sections 14 and 24 are within or in close proximity to the State Park and mitigation measures would most likely still result in at least moderate to strong contrasts therefore a “No Surface Occupancy” stipulation was placed on these sections of the parcel to reduce impacts to the visual resources of the State Park. Two portions of the parcel are located on the side of Spinney Mountain directly above the reservoir and recreation facilities with minimal options for blending oil and gas production facilities, roads and pads. The portion of Parcel #6488 within section 14 is located directly adjacent to and in close proximity to the main entrance road with little options for blending and screening available.

Photo showing landscape of Parcel #6488 at entrance to Spinney Mountain State Park

The leases located near the south shore of John Martin Reservoir State Park would most likely introduce weak contrasts in color and shape from the equipment as well as the associated roads and pads. Due to the rolling hill topography of the terrain around the reservoir and the recreation facilities located on the north and east shores over 2 miles away it is not likely that any facilities introduced during production would actually be visible from the state park. If the parcels went into production BMPs such as careful placement, using low profile installations and appropriate colored facilities would further reduce impacts.

Parcel #6484 are located within the viewshed of the subdivision located on Red Hill. If the lease were to go into production weak contrasts in color and shape would be introduced from the equipment as well as the associated roads and pads. The expansive views afforded by the lots, the superior relationship (looking down upon) to the lease parcels and the use of visual resource management BMPs such as painting equipment a proper color that blends with the environment and careful location of facilities would further lessen contrasts. Leasing these parcels would meet the VRM Class III objectives established for this area.

Cumulative Impacts: None

Mitigation/Residual Effects: None

<u>Preferred Alternative</u>:
Direct and Indirect Impacts: The direct and indirect effects of the preferred alternative on visual resources would be similar to those described under the proposed action, however with the deferral of lease parcels in Park County, potential impacts to those parcels are eliminated.

Development under the preferred alternative would be less than under the proposed action and therefore impacts would be proportionately reduced.

Cumulative Impacts: Same as Proposed Action

Mitigation/Residual Effects: None

No Action Alternative:
There would be no impacts associated with visual resources from this alternative.

3.4.5 Wastes, Hazardous or Solid

Affected Environment: No record of any wastes or hazardous materials on the lands associated with the lease parcels have been found. Current conditions of these lands are assumed to be clean and have no evident contamination.

Environmental Effects
Proposed Action:
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. With this proposed action, an understanding of what may be required in related future actions may be needed for planning purposes with regards to material and waste management. These are itemized below:

- No hazardous material, as defined by 42 U.S.C. 9601 (which includes materials regulated under CERCLA, RCRA and the Atomic Energy Act, but does not include petroleum or natural gas) should be used, produced, transported or stored on the lands associated with this project. If required, will need to be coordinated with the BLM at that time.
- All Above Ground Storage Tanks will need to have secondary containment and constructed in accordance with standard industry practices or an associated Spill Prevention Control and Countermeasures plan in accordance with State regulations (if applicable).
- If drums are used, secondary containment constructed in accordance with standard industry practices or governing regulations is required. Storage and labeling of drums should be in accordance with recommendations on associated MSDS sheets, to account for chemical characteristics and compatibility.
- Appropriate level of spill kits need to be onsite and in vehicles.
- All spill reporting needs to follow the reporting requirements outlined in NTL-3A.
- No treatment or disposal of wastes on site is allowed.

- All concrete washout water needs to be contained and properly disposed of at a permitted offsite disposal facility.

Cumulative Impacts: This action may lead to future operations that would use some type of chemical or petroleum product. However, if mitigation measures are understood for this action, then future impacts would be limited.

Mitigation/Residual Effects:
Mitigation: Mitigation/Residual Effects: The following mitigation will assist in reducing potential spills resulting in groundwater and/or soil contamination:

- All Above Ground Storage Tanks will need to have secondary containment and constructed in accordance with standard industry practices or an associated Spill Prevention Control and Countermeasures plan in accordance with State regulations (if applicable).
- If drums are used, secondary containment constructed in accordance with standard industry practices or governing regulations is required. Storage and labeling of drums should be in accordance with recommendations on associated MSDS sheets, to account for chemical characteristics and compatibility.
- Appropriate level of spill kits need to be onsite and in vehicles.
- All spill reporting needs to follow the reporting requirements outlined in NTL-3A.
- No treatment or disposal of wastes on site is allowed.
- All concrete washout water needs to be contained and properly disposed of at a permitted offsite disposal facility.
- If pits are utilized they need to be lined to mitigate leaching of liquids to the subsurface, as necessary.

Preferred Alternative:
Direct and Indirect Impacts: The impacts of leasing the parcels under the preferred alternative would be similar to the proposed action; however the removal of parcels in Park County would remove the potential for impacts to these parcels.

Cumulative Impacts: Same as Proposed Action

Mitigation/Residual Effects:
Mitigation: Mitigation/Residual Effects: The following mitigation will assist in reducing potential spills resulting in groundwater and/or soil contamination:

- All Above Ground Storage Tanks will need to have secondary containment and constructed in accordance with standard industry practices or an associated Spill Prevention Control and Countermeasures plan in accordance with State regulations (if applicable).
- If drums are used, secondary containment constructed in accordance with standard industry practices or governing regulations is required. Storage and labeling of drums

should be in accordance with recommendations on associated MSDS sheets, to account for chemical characteristics and compatibility.

- Appropriate level of spill kits need to be onsite and in vehicles.
- All spill reporting needs to follow the reporting requirements outlined in NTL-3A.
- No treatment or disposal of wastes on site is allowed.
- All concrete washout water needs to be contained and properly disposed of at a permitted offsite disposal facility.
- If pits are utilized they need to be lined to mitigate leaching of liquids to the subsurface, as necessary.

No Action Alternative:
There would be no impacts associated with waste or hazardous materials from this alternative.

3.4.6 Noise

Affected Environment: The subject lease parcels are situated in a variety of settings that include the parkland and hilly terrain of South Park to the open prairie and farmland of the eastern plains. Ambient noise at each of these locations will vary depending on the amount of any nearby noise producing infrastructure. Without detailed noise analysis for each of the parcels current noise levels are difficult to determine. It is assumed however, that due to the rural nature of the parcel settings that ambient noise in most of the settings is relatively low.

Environmental Effects

Proposed Action:
Direct and Indirect Impacts: The current action, that of leasing federal land for oil and gas development, will have no direct impact on noise. At the development stage certain levels of noise are associated with drilling operations, these include drill rig operation, compressors/generators and general machine and vehicle operation. Impacts form noise would be variable depending on their distances from residences or communities. These impacts are temporary and terminate when drilling operations are complete. Due to their temporary nature impacts from noise are not considered to be significant.

Cumulative Impacts: Due to the temporary nature of the generated noise at the development or APD stage there would be no cumulative impacts from noise.

Mitigation/Residual Effects: None

Preferred Alternative:

Direct and Indirect Impacts: The impacts of leasing the parcels under the Preferred Alternative would be similar to the Proposed Action; however the removal of parcels in Park County would remove the development stage noise impact in that region.

Cumulative Impacts: Same as Proposed Action

Mitigation/Residual Effects: None

No Action Alternative: There would be no impacts associated with noise from this alternative.

3.5 LAND RESOURCES

3.5.1 Recreation

Affected Environment:
The majority of the parcels proposed for lease are located on lands whose surface ownership is not public and no public recreation use occurs. The parcels proposed for lease with BLM managed surface are relatively small in size (mostly 40 acres) and are "land locked" by private ownership with no public recreation use occurring. Parcels #6488, 6489, 6485, 6486 and 6487 are located in close proximity or within Spinney Mountain State Park that is promoted as a gold medal fishery in a scenic peaceful setting. Fishing is the primary recreation activity in this area including shore casting and float fishing. The inflow from the South Platte River just above Spinney Reservoir is also a popular destination for fisherman and is owned and managed by Colorado Division of Parks and Wildlife.
Environmental Effects

Environmental Effects
Proposed Action
Direct and Indirect Impacts: On the parcels that are either "land locked" or are located on private surface there is no public recreation use and therefore impacts to recreation would be minimal or none.

The portions of parcels located in close proximity to Spinney Mountain State Park would impact both the physical and social setting of the area by introducing additional roads and other human elements that are not directly related to recreation facilities. As with visual resources, BMPs utilized if the lease were developed could greatly reduce these impacts. Careful location of facilities and use of appropriate colors for equipment would minimize changes in the physical setting for the area. The social setting would still be modified if the lease were developed particularly during drill operations involving additional traffic and large drilling equipment. This would most likely be for a relatively short period of time. Once completed the change in the social setting would return to near pre drilling operations levels.

With a "No Surface Occupancy" (NSO) stipulation placed on the portions of Parcel #6488 in sections 14 and 24 to reduce impacts to visual resources the change in the physical and social setting would be greatly reduced. Directional drilling could still occur but the actual site of equipment is unknown and therefore the extent that impacts would be reduced is also unknown. Parcel #6488 is located in close proximity to

and within the viewshed of the State Park including directly and adjacent to the entrance station and on the side of the namesake Spinney Mountain directly above the reservoir and recreation facilities. If developed, BMPs during the permit period would allow for movement of facilities to take advantage of topography further reducing impacts. Additionally, if timing of drilling operations were limited to winter months when the State Park was closed impacts to social settings associated with the actual drilling operations would be greatly minimized.

The portion of parcel #6489 located in section 35 is approximately a ½ mile from the southern parking and boat launch area of the state park. Any development on this parcel would likely introduce changes in the physical setting by introducing nearby intrusions that would likely be noticed by visitors to this area of the state park. There would also be changes to the social setting if developed particularly during drilling operations where additional traffic and large equipment would detract from the peaceful setting provided by the state park. This could be greatly reduced if drilling operations were limited to the winter months when the State Park is closed.

Although the portion of parcel #6488 located within section 19 is not in the immediate vicinity of the Spinney Mountain State Park it is located within a ¼ mile of the South Platte River which is managed by Colorado Division of Parks and Wildlife and is a popular destination for stream fishing. Due to the close proximity to the river, if this lease were developed there would be a change in both the physical and social setting through the introduction of roads, equipment, noise and traffic associated with drilling operations detracting from the peaceful setting provided by the state along this stretch of river.

Cumulative Impacts: If additional oil and gas development continues to occur in the vicinity of Spinney Mountain State Park there would begin to be cumulative changes that could detract from the peaceful and serene stated management objectives of the state park by introducing a variety of human intrusions such as roads, equipment, facilities, and workers.

Mitigation/Residual Effects: Recommend limiting drilling to November 15th – April 15th during State Park closure to reduce impacts.

<u>Preferred Alternative:</u>
Direct and Indirect Impacts: The impacts of leasing the parcels under the preferred alternative would be similar to the proposed action; however the removal of parcels in Park County would further protect recreation resources in South Park.

Cumulative Impacts: Same as Proposed Action

Mitigation/Residual Effects: None

<u>No Action Alternative</u>: There would be no impacts associated with recreation from this alternative.

3.5.2 Range Management

Affected Environment: Most of this area supports short grasse prairie. Needleandthread, prairie junegrass, blue grama, galleta, threeawn, ring muhly, and alkali sacaton are the major species. It is likely that the native plant community has been altered due to the long-term grazing practices in the area. The nominated parcels include a few livestock grazing allotments administered by the BLM Royal Gorge Field Office. There may be fences, water developments, and other rangeland improvement projects within the proposed parcels.

Environmental Effects

Proposed Action:

Direct and Indirect Impacts: 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. Generally there is an initial loss of forage (animal unit month or AUMs) associated with each development related disturbance. The amount of forage loss will vary based on the productivity of the affected ecological site prior to disturbance as well as the amount of the disturbance that is reclaimed and the success of re-vegetation actions. Livestock forage loss will also vary based on the distance of that site from livestock water sources. Areas with steeper topography are used less by livestock so forage losses resulting from development in those areas have less impact on livestock grazing. The forage loss is reduced by 50-60 percent after successful interim reclamation. After successful final reclamation herbaceous forage production will likely be slightly higher than pre-disturbance levels until woody re-vegetation reestablishes.

Rangeland improvements such as fences, corrals, and watering facilities could be impacted by road and pad construction. Placement of facilities near rangeland improvement projects could compromise their usefulness, particularly during the development stage. In addition closeness to water can increase potential for stock to use the pad areas for resting, rubbing, and potential exposure to other drilling related hazards. Livestock might avoid an area during the period of active development due to the increased activity and noise levels.

Cumulative Impacts: In general, the proposed action would have little cumulative impacts to the range resource. Should leases be developed in the future, oil and gas infrastructure is such that it has little effect on grazing.

Mitigation/Residual Effects: Mitigation: Development actions would avoid rangeland improvement projects (e.g., ponds, tanks, waterlines, fences, corrals, cattle-guards, gates etc.) if possible but if they could not be avoided, the project proponent would relocate the facilities to an adjacent BLM designated site and reconstruct them to BLM specifications to maintain their original function and purpose. If fences would be affected by development, the project

proponent would install temporary fencing to prevent unwanted livestock movement between allotments or pastures. Long term trend monitoring sites would be avoided if at all possible. The BLM notifies grazing permittees on a site-by-site basis as part of the APD process. Best Management Practices would be incorporated into the COAs during evaluation of a specific project or APD.

Preferred Alternative:
Direct and Indirect Impacts: The impacts of leasing the parcels under the Preferred Alternative would be similar to the Proposed Action; however the removal of parcels in Park County would further protect rangelands in South Park.

Protective/Mitigation Measures: Future Conditions of Approval, and BLM directives at the APD stage is adequate to protect rangelands on the parcels being proposed for leasing.

Cumulative Impacts: Cumulative impacts of the Preferred Alternative would be similar to the Proposed Action.

No Action Alternative:
Direct and Indirect Impacts: There would be no new impacts to the range management from the No Action Alternative.

Cumulative Impacts: None.
Mitigation/Residual Effects: None.

3.6 CUMULATIVE IMPACTS SUMMARY

Cumulative impacts may result from the development of the proposed leases when added to non-project impacts that result from past, present, and reasonably foreseeable future actions. The potential exists for future oil and gas development throughout the Royal Gorge Field Office. Historically, within the area of the RGFO, that encompasses the eastern half of Colorado, the vast majority of oil and gas activity has occurred and is occurring on private surface and private minerals, where the federal government has no jurisdiction. This is followed by that activity on private surface with underlying federal minerals (split estate) and lastly by federal surface/federal minerals. For the Royal Gorge Field Office relatively very few well development activities have occurred on BLM administered surface when compared to privately owned surface. For public lands, the BLM has records of past projects as well as oil and gas activities that allows for a more thorough assessment of cumulative impacts. The cumulative impacts assessment for development that has occurred on private surface is more problematic since the BLM generally has no knowledge or records of activities, other than oil and gas development, on the private land.

Air Quality and Climate: This lease sale, when combined with the past, present and reasonably

foreseeable actions (including increased traffic and the need for water disposal facilities) will elevate potential for the deterioration of air quality in eastern Colorado. Increased development of fluid minerals will result in a cumulative increase in surface and subsurface disturbances as well as increase emissions during drilling and completion activities. The type of impacts will be the same as described under environmental impacts associated with the proposed action. However, the severity of the impacts will be elevated with increased development.

Soils: Throughout the lease area there are many current and historic activities that affect soil resources. These activities include: oil and gas development, residential development, grazing, mining and recreation. At the 5th level watershed scale, the leasing and subsequent development of these parcels would add an additional impact to soil resources into the future. Most of this impact would be phased in and lessened as individual wells are completed and older wells are reclaimed.

Water Quality: Throughout the lease area there are many current and historic activities that affect water quality. These activities include: oil and gas development, residential development, grazing, mining and recreation. At the 5th level watershed scale, the leasing and subsequent development of these parcels would add an additional impact to water resources into the future. Most of this impact would be phased in and lessened as individual wells are completed and older wells are reclaimed. Overall, it is not expected that the leasing and possible future development of the parcels would cause long term degradation of water quality below State standards.

Threatened, Endangered and Sensitive Species, Terrestrial Wildlife and Migratory Birds: Throughout the lease area there are many activities currently occurring, along with historic impacts, which affect wildlife resources. These activities include: oil and gas development, residential development, grazing, agriculture, mining and recreation. While the leasing of parcels will not compound these impacts, future oil and gas development may impose deleterious effects. Every parcel is unique and cumulative impacts will need to be thoroughly addressed in the development and APD stage.

Wetlands and Riparian Zones and Aquatic Wildlife: Regional variation in land use modification occurs in the counties where lease is proposed. Overall disturbance varies from minimal on parcels near headwater regions to extensive with change coming from agricultural, plowing, irrigation and other associated activities. On certain parcels post lease development would be intrusive where development would be noticeable in proximity to riparian areas and wetlands. In other locations, development would be masked by extensive agriculture, etc. within modified drainage ways and possibly in proximity to other oil and gas development. Cumulative impact analysis at the scale and stage of the lease is less meaningful than at the APD stage if a parcel is leased and development plans move forward.

Wildlife Aquatic: Historic aquatic habitat modifying land uses vary from minimal to extensive resulting from grazing, agricultural modification, irrigation, reservoirs affects, and other modification. Certain parcels post lease development would be intrusive where development would be noticeable creating disturbance adjacent to along riparian areas. In other locations, development would be masked by extensive agriculture within modified drainage ways or in proximity to other oil and gas development. Cumulative impact analysis at the scale and stage of the lease is less meaningful than at the APD stage if a parcel is leased and development plans move forward.

Wildlife Terrestrial: Throughout the lease area there are many activities currently occurring, along with historic impacts, which affect wildlife resources. These activities include: oil and gas development, residential development, grazing, agriculture, mining and recreation. While the leasing of parcels will not compound these impacts, future oil and gas development may impose deleterious effects. Every parcel is unique and cumulative impacts will need to be thoroughly addressed in the development and APD stage.

Migratory Birds: Throughout the lease area there are many activities currently occurring, along with historic impacts, which affect wildlife resources. These activities include: oil and gas development, residential development, grazing, agriculture, mining and recreation. While the leasing of parcels will not compound these impacts, future oil and gas development may impose deleterious effects. Every parcel is unique and cumulative impacts will need to be thoroughly addressed in the development and APD stage.

Cultural Resources: The cumulative effects of development of a particular lease may include secondary effects to historic properties because of increased visitation to the area, better access to previously inaccessible sites, increased erosion of surface properties from road and pad construction, and the increased potential for inadvertent or deliberate vandalism. The potential for and severity of these secondary effects cannot be analyzed at the lease stage; rather, when an APD or plan of development is submitted. Lessees must comply with existing laws and regulations, and any potential cumulative and secondary effects to cultural resources will be addressed when development plans are submitted for BLM approval.

Paleontological Resources: Cumulative impacts to paleontological resources could result from surface disturbing activities associated with leasing, when added to past, present, and reasonably foreseeable future actions, but would not be expected to contribute to cumulative impacts to paleontological resources in the lease area if protective mitigation measures are followed.

Recreation: If additional oil and gas development continues to occur in the vicinity of Spinney Mountain State Park there would begin to be cumulative changes that could detract from the peaceful and serene stated management objectives of the state park by introducing a variety of

human intrusions such as roads, equipment, facilities, and workers.

Wastes, Hazardous or Solid: This action may lead to future operations that would use some type of chemical or petroleum product. However, if mitigation measures are understood for this action, then future impacts would be limited.

CHAPTER 4 - CONSULTATION AND COORDINATION

4.1 TRIBES, INDIVIDUALS, ORGANIZATIONS, OR AGENCIES CONSULTED

Prior to the development of the EA, notification letters were sent to the Colorado Parks and Wildlife (CPW), Native American Tribes, and right of way holders.

The BLM contacted the following tribes: Apache Tribe of Oklahoma, Cheyenne and Arapaho Tribes of Oklahoma, Cheyenne River Sioux Tribe, Comanche Tribe of Oklahoma, Crow Creek Sioux, Eastern Shoshone, Jicarilla Apache Nation, Kiowa Tribe of Oklahoma, Northern Arapaho Tribe, Northern Cheyenne Tribe, the Ute Tribe, Oglala Sioux Tribe, Rosebud Sioux Tribe, Southern Ute Tribe, Standing Rock Lakota Tribe, and the Ute Mountain Ute Tribe..

CPW was notified of the nominated parcels and the upcoming lease sale in a letter from the BLM state office. Steve Yamashita, Northeast Regional Manager, of CPW submitted comments to the field office in a letter dated February 13, 2012 and received by BLM February 16, 2012.

BLM also coordinated and had an informal conference with US Fish and Wildlife Service regarding impacts to listed species on March 13, 2012, and the National Park Service was consulted regarding the potential impact of the proposed lease sale on Amache (the Grenada Relocation Center) and the Santa Fe Trail.

A consultation with potentially interested Native American tribes has been completed, and no concerns were identified. The BLM contacted the following tribes: Apache Tribe of Oklahoma, Cheyenne and Arapaho Tribes of Oklahoma, Cheyenne River Sioux Tribe, Comanche Tribe of Oklahoma, Crow Creek Sioux, Eastern Shoshone, Jicarilla Apache Nation, Kiowa Tribe of Oklahoma, Northern Arapaho Tribe, Northern Cheyenne Tribe, the Ute Tribe, Oglala Sioux Tribe, Rosebud Sioux Tribe, Southern Ute Tribe, Standing Rock Lakota Tribe, and the Ute Mountain Ute Tribe.

4.2 LIST OF PREPARERS AND PARTICIPANTS

INTERDISCIPLINARY REVIEW

NAME	TITLE	AREA OF RESPONSIBILITY
Matt Rustand	Wildlife Biologist	Terrestrial Wildlife, T&E, Migratory

		Birds
Jeff Williams	Range Management Spec.	Range, Vegetation, Farmland
Chris Cloninger	Range Management Spec.	Range, Vegetation, Farmland
John Lamman	Range Management Spec.	Range, Vegetation, Farmland, Weeds
David Epstein	Economist	Socioeconomics, Environmental Justice
Dave Gilbert	Fisheries Biologist	Aquatic Wildlife, Riparian/Wetlands
Stepanie Carter	Geologist	Minerals, Paleontology, Waste Hazardous or Solid
Melissa Smeins	Geologist	Minerals, Paleontology
John Smeins	Hydrologist	Hydrology, Water Quality/Rights, Soils
Chad Meister	Air Quality Specialist	Air Quality
Tony Mule'	Cadastral Surveyor	Cadastral Survey
Kalem Lenard	Outdoor Recreation Planner	Recreation, Wilderness, Visual, ACEC, W&S Rivers
John Nahomenuk	River Manager	Recreation, Wilderness, Visual, ACEC, W&S Rivers
Jim Rhett	Natural Resources Specialist	Minerals
Ken Reed	Forester	Forestry
Martin Weimer	NEPA Coordinator	Noise
Monica Weimer	Archaeologist	Cultural, Native American
Vera Matthews	Realty Specialist	Realty
Bob Hurley	Fire Management Officer	Fire Management
Steve Cunningham	Law Enforcement Ranger	Law Enforcement

NAME OF PREPARER: Vincent Hooper

SUPERVISORY REVIEW: Keith Berger

NAME OF ENVIRONMENTAL COORDINATOR: Martin Weimer

DATE:

ATTACHMENTS:
Attachment A: Pre-EA Parcels Proposed for Lease
Attachment B: Parcels Available for Lease with Deferred Portions
Attachment C: Parcels Available for Lease with Applied Stipulations
Attachment D: Stipulation Exhibits
Attachment E: Parcel Maps

CHAPTER 5 – REFERENCES

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Attachment A - Pre-EA Parcels Proposed for Lease
February 2013 Colorado Competitive Oil and Gas Lease Sale

RGFO February 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: 6481 SERIAL #:
T. 0340S., R 0460W., 6TH PM
Sec. 9: Lot 7,19,20;
Sec. 16: Lot 1,10,11,17,21,23;
Sec. 17: Lot 6;
Baca County
Colorado 210.430 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6482 SERIAL #:
T. 0340S., R 0460W., 6TH PM
Sec. 19: Lot 5,6; U.S. Interest 100.00%
Sec. 19: NE,E2NW; U.S. Interest 100.00%
Sec. 22: S2; U.S. Interest 100.00%
Baca County
Colorado 638.970 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6490 SERIAL #:
T. 0210S., R 0510W., 6TH PM
Sec. 19: Lot 3,4; U.S. Interest 50.00%
Sec. 19: E2SW,SE; U.S. Interest 50.00%

Bent County
Colorado 320.910 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6491 SERIAL #:
T. 0210S., R 0510W., 6TH PM
Sec. 1: Lot 6;
Sec. 2: Lot 1,2,6,8,9;
Sec. 2: SW;
Sec. 6: Lot 1-4;
Sec. 25: SESE;
Sec. 31: S2SE;
Sec. 32: S2SW;
Sec. 34: SENE;

Sec. 35: SWNW,NWSW;
Bent County
Colorado 921.950 Acres
PVT/BLM;BLM; CCDO: RGRA

PARCEL ID: 6492 SERIAL #:
T. 0210S., R 0500W., 6TH PM
Sec. 29: S2SE;
Sec. 35: SW;
Bent County
Colorado 240.000 Acres
PVT/BLM; CCDO: RGRA

The following lands are subject to Exhibit CO-28 to protect water impoundments/streams/wetlands
Sec. 35: SW

PARCEL ID: 6493 SERIAL #:
T. 0220S., R 0480W., 6TH PM
Sec. 22: S2NE,N2SE; U.S. Interest 50.00%
Bent County
Colorado 160.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6494 SERIAL #:
T. 0220S., R 0480W., 6TH PM
Sec. 25: Lot 2;
Bent County
Colorado 8.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6495 SERIAL #:
T. 0220S., R 0500W., 6TH PM
Sec. 2: Lot 3,4;
Sec. 2: S2NW;
Sec. 5: SESW,SWSE;
Sec. 6: Lot 6,7;
Sec. 8: NE,N2NW,N2SE;
Sec. 9: SWNE,SENW;
Sec. 12: W2NE,NW,SW;
Sec. 15: E2;
Bent County
Colorado 1451.200 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6496 SERIAL #:
T. 0220S., R 0510W., 6TH PM
Sec. 1: Lot 1,2;
Sec. 1: S2NE,N2SE;
Sec. 2: Lot 2;

Sec. 2: S2NE,NWSE;
Sec. 4: Lot 4;
Sec. 10: S2NE;
Bent County
Colorado 529.170 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6497 SERIAL #:
T. 0220S., R 0520W., 6TH PM
Sec. 11: SE;
Sec. 17: S2N2,N2S2;
Sec. 22: SWSW;
Bent County
Colorado 520.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6498 SERIAL #:
T. 0230S., R 0480W., 6TH PM
Sec. 1: S2SE;
Bent County
Colorado 80.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6499 SERIAL #:
T. 0230S., R 0490W., 6TH PM
Sec. 1: Lot 1-3;
Sec. 9: NENE;
Sec. 10: NWNW;
Bent County
Colorado 126.110 Acres
PVT/BLM;BLM; CCDO: RGRA

PARCEL ID: 6500 SERIAL #:
T. 0230S., R 0490W., 6TH PM
Sec. 13: Lot 3,4;
Sec. 13: SWSW;
Sec. 14: N2N2,SWNW,NWSW;
Sec. 15: N2NE,SWNW,W2SW;
Bent County
Colorado 490.670 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6501 SERIAL #:
T. 0250S., R 0520W., 6TH PM
Sec. 2: SENE;
Sec. 7: Lot 1-4;
Sec. 7: E2W2;
Sec. 15: NESE,N2SE;
Sec. 19: Lot 1-4;

Sec. 19: E2W2;
Bent County
Colorado 804.360 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6502 SERIAL #:
T. 0240S., R 0480W., 6TH PM
Sec. 25: SE;
Sec. 35: SW;
Bent County
Colorado 320.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6503 SERIAL #:
T. 0240S., R 0490W., 6TH PM
Sec. 2: Lot 4;
Sec. 2: SWNW,W2SW;
Sec. 11: E2NW,NWSW;
Sec. 13: NENW;
Sec. 15: S2NE;
Sec. 27: SWNE,W2SE,SESW;
Sec. 32: N2SW;
Bent County
Colorado 640.150 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6504 SERIAL #:
T. 0240S., R 0500W., 6TH PM
Sec. 1: NESW;
Sec. 12: SENE,SWNW;
Sec. 14: W2;
Sec. 15: E2SE;
Sec. 27: SWNW,W2SW;
Sec. 32: SE;
Bent County
Colorado 800.000 Acres
PVT/BLM; CCDO: RGRA
PARCEL ID: 6505 SERIAL #:

T. 0240S., R 0510W., 6TH PM
Sec. 1: Lot 1;
Sec. 5: SESE;
Sec. 8: NWNE;
Sec. 12: N2NE,SWNE,NENW;
Sec. 13: SWNW,S2SW;
Sec. 18: W2NE,N2SE;
Sec. 21: NE;
Sec. 26: E2,E2NW;
Sec. 27: W2SW;

Sec. 29: W2NE;
Sec. 34: NENE,W2NW;
Sec. 35: SW;
Bent County
Colorado 1560.080 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6506 SERIAL #:
T. 0240S., R 0520W., 6TH PM
Sec. 13: SESW;
Sec. 14: SESW;
Sec. 19: Lot 1-4;
Sec. 19: SENE,NESE;
Sec. 22: SENE,NESE;
Sec. 31: E2SE,SWSE;
Sec. 34: NENW,SESW;
Bent County
Colorado 612.800 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6507 SERIAL #:
T. 0250S., R 0480W., 6TH PM
Sec. 11: NE;
Sec. 13: NE;
Sec. 18: Lot 1-4;
Sec. 18: E2W2;
Sec. 32: S2;
Bent County
Colorado 955.280 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6508 SERIAL #:
T. 0250S., R 0490W., 6TH PM
Sec. 2: SENW;
Sec. 8: SESW;
Sec. 12: NENW;
Sec. 15: SW;
Sec. 17: E2NW;
Sec. 18: Lot 1;
Sec. 21: NESE,S2SE;
Sec. 22: N2NW,S2SW;
Sec. 24: SW;
Sec. 28: E2SW;
Sec. 30: Lot 4;
Sec. 30: SESW;
Sec. 32: SW;
Sec. 33: NE,E2NW;

Bent County

Colorado 1384.700 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6509 SERIAL #:
T. 0250S., R 0500W., 6TH PM
Sec. 32: E2NE,S2NW,N2SW,SWSE;
Sec. 33: SWNW,SESW;
Sec. 34: E2E2;
Bent County
Colorado 520.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6510 SERIAL #:
T. 0250S., R 0500W., 6TH PM
Sec. 3: Lot 1-4;
Sec. 4: SENE;
Sec. 8: SE;
Sec. 10: NE,E2NW,NWNW,E2SE;
Sec. 15: SENW,SWSW,E2SW;
Sec. 20: NWSE;
Sec. 22: N2NE,NENW,NWSW,S2SW;
Sec. 22: SESE;
Sec. 26: W2;
Sec. 27: E2,NW,NESW,S2SW;
Sec. 31: E2NE,NESE;
Bent County
Colorado 2245.930 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6511 SERIAL #:
T. 0250S., R 0510W., 6TH PM
Sec. 2: Lot 1-4;
Sec. 2: S2N2,S2;
Sec. 3: SENW,NESE;
Sec. 11: E2;
Bent County
Colorado 972.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6512 SERIAL #:
T. 0250S., R 0510W., 6TH PM
Sec. 19: SENE;
Sec. 20: NENE,SE;
Sec. 21: E2SE;
Sec. 28: NENE,SWSE;
Sec. 29: NENE,W2NE,SW;
Sec. 30: Lot 1,2;
Sec. 30: SESW;
Sec. 31: Lot 1,2;

Sec. 31: W2NE,E2NW;
Sec. 32: S2NE,E2NW,S2;
Sec. 33: NE,S2NW,S2;
Sec. 34: N2SW,SE;
Bent County
Colorado 2321.720 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6515 SERIAL #:
T. 0230S., R 0520W., 6TH PM
Sec. 19: Lot 1,2;
Sec. 19: NENW;
Sec. 25: NENE;
Sec. 28: NE,E2NW,NWNW;
Sec. 29: NENW,W2W2;
Sec. 30: E2NW;
Sec. 31: SWSE;
Sec. 33: SWSE;
Sec. 34: SESE;
Bent County
Colorado 840.150 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6516 SERIAL #:
T. 0230S., R 0510W., 6TH PM
Sec. 25: N2NE,SENE,NWSW,SESE;
Sec. 26: NE,NESW,N2SE;
Sec. 27: NW,E2SW,NESE,W2SE;
Sec. 34: W2NE,E2NW;
Sec. 35: N2NW,N2SW;
Bent County
Colorado 1160.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6517 SERIAL #:
T. 0230S., R 0510W., 6TH PM
Sec. 22: ALL;
Sec. 23: N2,N2S2;
Sec. 24: ALL;
Bent County
Colorado 1760.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6518 SERIAL #:
T. 0230S., R 0510W., 6TH PM
Sec. 21: N2,SW,N2SE,SWSE;
Sec. 28: E2,E2W2,W2SW;
Sec. 33: W2NW;
Bent County

Colorado 1240.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6519 SERIAL #:
T. 0230S., R 0510W., 6TH PM
Sec. 20: NENE,S2NE,NESW,SE;
Sec. 29: W2NW,N2SW;
Sec. 30: Lot 1,2;
Sec. 30: NE,E2NW;
Sec. 31: Lot 1,2;
Sec. 31: E2NW;
Bent County
Colorado 959.350 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6520 SERIAL #:
T. 0230S., R 0510W., 6TH PM
Sec. 11: NENE,S2NE,NESW,SE;
Sec. 12: NWNE,S2NE,NW,S2;
Sec. 13: N2N2,S2S2;
Sec. 14: NE,S2;
Sec. 15: S2NE,NESW,S2SW,SE;
Bent County
Colorado 2080.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6521 SERIAL #:
T. 0230S., R 0500W., 6TH PM
Sec. 29: W2NW;
Sec. 30: SENE,SE;
Sec. 31: NENW;
Bent County
Colorado 320.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6522 SERIAL #:
T. 0230S., R 0500W., 6TH PM
Sec. 17: S2N2NWNW,S2NWNW,SWNW;
Sec. 18: Lot 1-4;
Sec. 18: E2,E2W2;
Sec. 19: Lot 1-4;
Sec. 19: NE,E2NW,NESW,NWSE;
Bent County
Colorado 1153.200 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6523 SERIAL #:
T. 0230S., R 0500W., 6TH PM
Sec. 22: E2NE;

Bent County
Colorado 80.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6524 SERIAL #:
T. 0230S., R 0500W., 6TH PM
Sec. 23: N2,N2SW,SE;
Sec. 24: N2,SW,N2SE,SWSE;
Sec. 25: NWNE,NENW;
Bent County
Colorado 1240.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6534 SERIAL #:
T. 0210S., R 0520W., 6TH PM
Sec. 19: NE;
Sec. 21: NW;
Bent County
Colorado 320.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6535 SERIAL #:
T. 0230S., R 0490W., 6TH PM
Sec. 19: Lot 3;
Sec. 20: E2NENW,SWNW;
Bent County
Colorado 78.380 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6538 SERIAL #:
T. 0230S., R 0510W., 6TH PM
Sec. 1: PART OF THE S2;
Sec. 1: OF RR ROW COC0120033;
Bent County
Colorado 182.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6305 SERIAL #:
T. 0250S., R 0530W., 6TH PM
Sec. 34: ALL;
Sec. 35: ALL;
Bent County
Colorado 1280.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6306 SERIAL #:
T. 0250S., R 0530W., 6TH PM
Sec. 28: N2NW;
Sec. 29: N2NE,SW,W2SE,SESE;

Sec. 30: Lots 3,4;
Sec. 30: E2SW,SE;
Sec. 32: NE,W2;
Sec. 33: E2;
Bent County
Colorado 1557.6000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6307 SERIAL #:
T. 0250S., R 0530W., 6TH PM
Sec. 22: S2NW,N2S2;
Sec. 23: SENE,E2SE,NWSE;
Sec. 24: N2,SW;
Sec. 25: W2;
Sec. 26: E2E2,SWNE,SESW,W2SE;
Sec. 27: W2NW,S2SW,SESE;
Bent County
Colorado 1720.000 Acres
PVT/BLM; CCDO: RGRA
PARCEL ID: 6308 SERIAL #:

T. 0250S., R 0530W., 6TH PM
Sec. 20: NESW;
Sec. 21: W2;
Bent County
Colorado 360.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6309 SERIAL #:
T. 0250S., R 0530W., 6TH PM
Sec. 17: S2;
Sec. 18: Lot 1,2;
Sec. 18: NE,E2NW;
Bent County
Colorado 636.600 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6310 SERIAL #:
T. 0250S., R 0530W., 6TH PM
Sec. 10: SWSW;
Sec. 11: N2NE,E2NW;
Sec. 12: E2NE,NWNW,E2SW,SE;
Sec. 13: NE,E2NW,NWNW;
Sec. 14: SWNW;
Sec. 15: E2NE,SWNE,W2NW,SENW;
Sec. 15: NESE;
Bent County
Colorado 1160.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6311 SERIAL #:
T. 0250S., R 0530W., 6TH PM
Sec. 5: Lot 1-4;
Sec. 5: S2N2,S2;
Sec. 6: Lot 1;
Sec. 6: SENE,SESW,NESE,S2SE;
Sec. 7: Lot 3,4;
Sec. 7: NE,E2SW,SE;
Bent County
Colorado 1352.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6312 SERIAL #:
T. 0250S., R 0530W., 6TH PM
Sec. 1: Lot 3,4;
Sec. 1: S2NW,W2SW,SWSE;
Sec. 2: W2SW;
Bent County
Colorado 359.550 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6313 SERIAL #:
T. 0240S., R 0530W., 6TH PM
Sec. 19: E2;
Sec. 20: NENE,W2NE,NW,N2S2;
Sec. 21: E2NW;
Sec. 28: N2;
Sec. 30: Lot 1-4;
Sec. 30: E2,E2W2;
Sec. 33: SE;
Sec. 34: SW;
Bent County
Colorado 2113.600 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6314 SERIAL #:
T. 0240S., R 0530W., 6TH PM
Sec. 5: SW;
Sec. 6: SE;
Sec. 7: Lot 1-4;
Sec. 7: E2,E2W2;
Sec. 8: ALL;
Sec. 11: NE;
Sec. 18: Lot 1-4;
Sec. 18: E2,E2W2;
Bent County
Colorado 2375.200 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6315 SERIAL #:
T. 0230S., R 0530W., 6TH PM
Sec. 29: N2,N2SE;
Sec. 30: E2;
Sec. 31: Lot 3,4;
Sec. 32: NESE,S2SE;
Bent County
Colorado 912.250 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6316 SERIAL #:
T. 0230S., R 0530W., 6TH PM
Sec. 28: N2,N2SW;
Bent County
Colorado 400.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6317 SERIAL #:
T. 0230S., R 0530W., 6TH PM
Sec. 25: N2;
Sec. 26: N2;
Bent County
Colorado 640.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6318 SERIAL #:
T. 0230S., R 0530W., 6TH PM
Sec. 24: ALL;
Bent County
Colorado 640.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6319 SERIAL #:
T. 0230S., R 0530W., 6TH PM
Sec. 23: ALL;
Bent County
Colorado 640.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6320 SERIAL #:
T. 0230S., R 0530W., 6TH PM
Sec. 21: ALL;
Sec. 22: E2;
Bent County
Colorado 960.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6321 SERIAL #:

T. 0230S., R 0530W., 6TH PM
Sec. 17: SENE,SWSW;
Sec. 19: E2,E2SW;
Sec. 20: E2,NWNW,S2NW,SW;
Bent County
Colorado 1080.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6322 SERIAL #:

T. 0230S., R 0530W., 6TH PM
Sec. 15: W2;
Bent County
Colorado 320.000 Acres
PVT/BLM; CCDO: RGRA
PARCEL ID: 6323 SERIAL #:

T. 0230S., R 0530W., 6TH PM
Sec. 13: S2;
Sec. 14: S2NE,S2;
Bent County
Colorado 720.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6324 SERIAL #:
T. 0220S., R 0530W., 6TH PM
Sec. 5: Lot 3,4;
Sec. 5: S2NW;
Sec. 8: S2NW;
Sec. 17: NW;
Sec. 18: Lot 1,2;
Sec. 18: E2NW;
Sec. 20: NENW;
Sec. 28: N2NWNW;
Bent County
Colorado 609.730 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6325 SERIAL #:
T. 0210S., R 0530W., 6TH PM
Sec. 2: Lot 6;
Sec. 4: Lot 3-5;
Bent County
Colorado 217.400 Acres

PVT/BLM; CCDO: RGRA

PARCEL ID: 6455 SERIAL #:
T. 0120S., R 0420W., 6TH PM

Sec. 34: Lot 1,2;
Cheyenne County
Colorado 79.060 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6456 SERIAL #:
T. 0160S., R 0440W., 6TH PM
Sec. 2: Lot 5,9,12;
Cheyenne County
Colorado 170.880 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6457 SERIAL #:
T. 0160S., R 0450W., 6TH PM
Sec. 4: Lot 12;
Sec. 28: Lot 5,6;

Cheyenne County
Colorado 144.130 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6459 SERIAL #:
T. 0160S., R 0480W., 6TH PM
Sec. 32: Lot 13-16;
Cheyenne County
Colorado 161.720 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6460 SERIAL #:
T. 0160S., R 0490W., 6TH PM
Sec. 34: E2NE,N2NW,W2SW,S2SE;
Cheyenne County
Colorado 320.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6461 SERIAL #:
T. 0160S., R 0500W., 6TH PM
Sec. 18: Lot 11,16;
Cheyenne County
Colorado 78.100 Acres

PVT/BLM; CCDO: RGRA

PARCEL ID: 6462 SERIAL #:
T. 0160S., R 0510W., 6TH PM
Sec. 4: Lot 5-12;
Sec. 8: NENE,NWNW,NESW,SESE;
Sec. 10: Lot 1,4,5,8;
Cheyenne County

Colorado 521.630 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6463 SERIAL #:
T. 0120S., R 0430W., 6TH PM
Sec. 34: Lot 3-6,9-12; U.S. Interest 50.00%
Cheyenne County
Colorado 312.050 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6465 SERIAL #:
T. 0130S., R 0450W., 6TH PM
Sec. 8: Lot 3-6,11-14; U.S. Interest 50.00%
Cheyenne County
Colorado 321.500 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6466 SERIAL #:
T. 0130S., R 0470W., 6TH PM
Sec. 2: Lot 5-12; U.S. Interest 50.00%
Cheyenne County
Colorado 322.610 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6467 SERIAL #:
T. 0150S., R 0430W., 6TH PM
Sec. 14: E2; U.S. Interest 50.00%
Cheyenne County
Colorado 320.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6468 SERIAL #:
T. 0140S., R 0480W., 6TH PM
Sec. 2: Lot 16,17;
Cheyenne County
Colorado 79.530 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6469 SERIAL #:
T. 0120S., R 0440W., 6TH PM
Sec. 6: Lot 11;
Cheyenne County
Colorado 44.970 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6470 SERIAL #:
T. 0120S., R 0420W., 6TH PM
Sec. 2: Lot 20;
Cheyenne County

Colorado 40.760 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6342 SERIAL #:
T. 0180S., R 0560W., 6TH PM
Sec. 20: SENE;
Crowley County
Colorado 40.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6343 SERIAL #:
T. 0190S., R 0560W., 6TH PM
Sec. 34: E2SW;
Crowley County
Colorado 80.000 Acres
BLM; CCDO: RGRA

PARCEL ID: 6414 SERIAL #:
T. 0220S., R 0560W., 6TH PM
Sec. 10: NWNE;
Crowley County
Colorado 40.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6415 SERIAL #:
T. 0210S., R 0550W., 6TH PM
Sec. 12: W2SE;
Crowley County
Colorado 80.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6416 SERIAL #:
T. 0190S., R 0550W., 6TH PM
Sec. 33: Lot 3,4;
T. 0200S., R 0550W., 6TH PM
Sec. 4: Lot 5,9;
Crowley County
Colorado 128.580 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6417 SERIAL #:
T. 0200S., R 0560W., 6TH PM
Sec. 30: NE;
Crowley County
Colorado 160.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6472 SERIAL #:
T. 0190S., R 0560W., 6TH PM

Sec. 25: E2;
Sec. 35: SE;
T. 0200S., R 0560W., 6TH PM
Sec. 2: Lot 1,2;
Sec. 2: S2NE;
Crowley County
Colorado 641.080 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6287 SERIAL #:
T. 0170S., R 0490W., 6TH PM
Sec. 2: Lot 1;
Sec. 2: SENE;
Kiowa County
Colorado 79.770 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6288 SERIAL #:
T. 0170S., R 0480W., 6TH PM
Sec. 4: Lot 4;
Sec. 4: S2N2;
Sec. 18: NWNE;
Kiowa County
Colorado 240.440 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6289 SERIAL #:
T. 0170S., R 0460W., 6TH PM
Sec. 24: NWNE;
Kiowa County
Colorado 40.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6290 SERIAL #:
T. 0170S., R 0420W., 6TH PM
Sec. 4: Lot 1-4; U.S. Interest 25.00%
Sec. 4: S2N2,S2; U.S. Interest 25.00%
Kiowa County
Colorado 651.960 Acres
BLM; CCDO: RGRA

PARCEL ID: 6291 SERIAL #:
T. 0170S., R 0420W., 6TH PM
Sec. 26: S2NE;
Kiowa County
Colorado 80.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6335 SERIAL #:

T. 0200S., R 0540W., 6TH PM
Sec. 4: Lot 5-10;
Sec. 5: Lot 5,6;
Sec. 6: Lot 8-10;
Sec. 7: Lot 5,6 ;
Sec. 7: E2NE;
Sec. 27: SWSW;
Sec. 27: EXCL RR ROW;
Sec. 33: S2NE;
Kiowa County
Colorado 421.570 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6363 SERIAL #:
T. 0200S., R 0520W., 6TH PM
Sec. 17: E2NE;
Sec. 29: E2SW;
Sec. 29: EXCL RW P-01827;
Kiowa County
Colorado 99.720 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6364 SERIAL #:
T. 0200S., R 0510W., 6TH PM
Sec. 12: W2SW;
Sec. 31: Lot 3,4;
Sec. 31: E2SW,SE;
Kiowa County
Colorado 400.250 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6365 SERIAL #:
T. 0200S., R 0500W., 6TH PM
Sec. 13: S2NW;
Kiowa County
Colorado 80.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6366 SERIAL #:
T. 0200S., R 0490W., 6TH PM
Sec. 27: S2NW;
Kiowa County
Colorado 80.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6367 SERIAL #:
T. 0200S., R 0450W., 6TH PM
Sec. 6: Lot 1;
Sec. 6: SENE;

Sec. 19: E2SW;
Sec. 29: SW;
Sec. 30: Lot 1,2;
Sec. 30: E2W2,SE;
Sec. 33: S2NE;
Sec. 35: S2SE;
Kiowa County
Colorado 804.200 Acres

PVT/BLM; CCDO: RGRA
PARCEL ID: 6368 SERIAL #:

T. 0200S., R 0440W., 6TH PM
Sec. 35: SW;
Kiowa County
Colorado 160.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6369 SERIAL #:
T. 0200S., R 0440W., 6TH PM
Sec. 7: E2; U.S. Interest 50.00%
Kiowa County
Colorado 320.000 Acres
BLM; CCDO: RGRA

PARCEL ID: 6370 SERIAL #:
T. 0200S., R 0420W., 6TH PM
Sec. 6: S2SE;
T. 0200S., R 0430W., 6TH PM
Sec. 1: W2SE;
Sec. 17: N2NE,E2SW;
Kiowa County
Colorado 320.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6371 SERIAL #:
T. 0200S., R 0420W., 6TH PM
Sec. 31: NE; U.S. Interest 25.00%
Kiowa County
Colorado 160.000 Acres
BLM; CCDO: RGRA

PARCEL ID: 6372 SERIAL #:
T. 0200S., R 0410W., 6TH PM
Sec. 6: Lot 7;
Sec. 7: Lot 1,7;
Sec. 8: Lot 2;
Sec. 17: Lot 1,2;
Sec. 20: Lot 1,2;

Sec. 29: Lot 1;
T. 0200S., R 0420W., 6TH PM
Sec. 23: SE;
Sec. 33: W2NW;
Sec. 34: E2NE;
Kiowa County
Colorado 687.750 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6373 SERIAL #:
T. 0190S., R 0540W., 6TH PM
Sec. 2: SE;
Sec. 8: Lot 10;
Sec. 23: Lot 3-6;
Sec. 31: Lot 13-18;
Sec. 32: Lot 12,13;

Kiowa County
Colorado 690.230 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6374 SERIAL #:
T. 0190S., R 0530W., 6TH PM
Sec. 7: Lot 13,14,19,20;
Sec. 10: SW;
Kiowa County
Colorado 329.410 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6375 SERIAL #:
T. 0190S., R 0510W., 6TH PM
Sec. 12: E2NE;
Sec. 23: E2SE;
Kiowa County
Colorado 160.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6376 SERIAL #:
T. 0190S., R 0470W., 6TH PM
Sec. 8: NW,NESW;
Sec. 23: NW;
Kiowa County
Colorado 360.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6377 SERIAL #:
T. 0190S., R 0460W., 6TH PM
Sec. 28: NE;
Kiowa County

Colorado 160.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6378 SERIAL #:
T. 0185S., R 0540W., 6TH PM
Sec. 2: Lot 1,4,5,8;
Sec. 3: Lot 3-6;
Sec. 4: Lot 1,2,7,8;
Kiowa County
Colorado 447.760 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6379 SERIAL #:
T. 0180S., R 0540W., 6TH PM
Sec. 2: Lot 3;
Sec. 2: SENW;
Sec. 9: S2NW;
Sec. 22: W2NE,E2NW;
Sec. 33: SW;
Kiowa County
Colorado 480.150 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6380 SERIAL #:
T. 0180S., R 0530W., 6TH PM
Sec. 30: SWNE,W2SE;
Kiowa County
Colorado 120.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6381 SERIAL #:
T. 0180S., R 0520W., 6TH PM
Sec. 19: Lot 1,2;
Sec. 29: SENW;
Kiowa County
Colorado 115.730 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6382 SERIAL #:
T. 0180S., R 0470W., 6TH PM
Sec. 21: SWNW;
Kiowa County
Colorado 40.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6383 SERIAL #:
T. 0180S., R 0460W., 6TH PM
Sec. 18: Lot 1,2;
Kiowa County

Colorado 71.810 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6384 SERIAL #:
T. 0180S., R 0480W., 6TH PM
Sec. 8: NE,E2NW; U.S. Interest 50.00%
Kiowa County
Colorado 240.000 Acres
BLM; CCDO: RGRA

PARCEL ID: 6406 SERIAL #:
T. 0170S., R 0550W., 6TH PM
Sec. 18: TR 52;
Sec. 18: TR 53;
Lincoln County
Colorado 76.600 Acres
BLM; CCDO: RGRA

PARCEL ID: 6407 SERIAL #:
T. 0170S., R 0540W., 6TH PM
Sec. 35: E2SW;
Lincoln County
Colorado 80.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6408 SERIAL #:
T. 0170S., R 0540W., 6TH PM
Sec. 18: Lot 4;
Lincoln County
Colorado 42.950 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6409 SERIAL #:
T. 0170S., R 0560W., 6TH PM
Sec. 1: SWSE;
Lincoln County
Colorado 40.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6410 SERIAL #:
T. 0160S., R 0560W., 6TH PM
Sec. 28: NWNE;
Lincoln County
Colorado 40.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6411 SERIAL #:
T. 0160S., R 0530W., 6TH PM
Sec. 2: NESE;

Lincoln County
Colorado 40.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6412 SERIAL #:
T. 0160S., R 0520W., 6TH PM
Sec. 12: SESW;
Lincoln County
Colorado 40.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6413 SERIAL #:
T. 0130S., R 0520W., 6TH PM
Sec. 10: NWSW;
Lincoln County
Colorado 40.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6419 SERIAL #:
T. 0160S., R 0550W., 6TH PM
Sec. 10: W2NE;
Lincoln County
Colorado 80.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6387 SERIAL #:
T. 0210S., R 0540W., 6TH PM
Sec. 34: E2NE;
Otero County
Colorado 80.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6388 SERIAL #:
T. 0230S., R 0560W., 6TH PM
Sec. 15: LOT 1 EXCL PATENT 1556;
Otero County
Colorado 18.250 Acres
BLM; CCDO: RGRA

PARCEL ID: 6389 SERIAL #:
T. 0230S., R 0540W., 6TH PM
Sec. 35: E2SE;
Otero County
Colorado 80.000 Acres

PVT/BLM; CCDO: RGRA

PARCEL ID: 6390 SERIAL #:
T. 0240S., R 0560W., 6TH PM

Sec. 20: W2NE;
Otero County
Colorado 80.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6391 SERIAL #:
T. 0240S., R 0550W., 6TH PM
Sec. 21: NESW;
Otero County
Colorado 40.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6392 SERIAL #:
T. 0250S., R 0550W., 6TH PM
Sec. 9: SESE;
Otero County
Colorado 40.000 Acres

PVT/BLM; CCDO: RGRA

PARCEL ID: 6393 SERIAL #:
T. 0250S., R 0540W., 6TH PM
Sec. 34: N2S2;
Otero County
Colorado 160.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6514 SERIAL #:
T. 0240S., R 0540W., 6TH PM
Sec. 1: S2NW;
Sec. 9: SWNE;
Otero County
Colorado 120.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6485 SERIAL #:
T. 0120S., R 0750W., 6TH PM
Sec. 13: SWSW;
Park County
Colorado 40.000 Acres
BLM; CCDO: RGRA

PARCEL ID: 6489 SERIAL #:
T. 0120S., R 0740W., 6TH PM
Sec. 33: NESW,SWSE;
Sec. 35: SWSW;
Park County
Colorado 120.000 Acres
BLM; CCDO: RGRA

PARCEL ID: 6484 SERIAL #:
T. 0100S., R 0760W., 6TH PM
Sec. 5: Lot 2;
Sec. 5: S2NW,SW;
Sec. 6: Lot 1;
Sec. 6: S2NE;
Sec. 19: Lot 1;
Sec. 19: NWNE,E2NW;
Sec. 28: NW,N2SW;
Sec. 32: E2NW;
Park County
Colorado 1002.990 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6486 SERIAL #:
T. 0120S., R 0750W., 6TH PM
Sec. 2: Lot 1-4;
Sec. 2: S2N2;
Sec. 3: Lot 1-3;
Sec. 3: S2NE,E2SE;
Sec. 12: N2S2;
Park County
Colorado 516.670 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6487 SERIAL #:
T. 0120S., R 0740W., 6TH PM
Sec. 10: S2N2,N2S2;
Sec. 11: N2NE,NW,N2S2;
Park County
Colorado 720.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6488 SERIAL #:
T. 0120S., R 0740W., 6TH PM
Sec. 14: E2NE;
Sec. 19: Lot 1-2;
Sec. 19: S2NE,E2NW;
Sec. 24: NWNW,S2SE;
Park County
Colorado 449.880 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6329 SERIAL #:

T. 0210S., R 0440W., 6TH PM
Sec. 14: W2NW;
Sec. 29: S2SE;

Sec. 33: E2;

Prowers County
Colorado 480.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6330 SERIAL #:
T. 0210S., R 0450W., 6TH PM
Sec. 12: E2;
Sec. 17: E2W2,SWSE;
Prowers County
Colorado 520.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6332 SERIAL #:
T. 0220S., R 0430W., 6TH PM
Sec. 25: W2NE,SENW,NESW; U.S. Interest 50.00%
Sec. 25: THOSE PORTIONS LYING ;
Sec. 25: EASTERLY OF R/W A.T. & S.F.R.R.;
Prowers County
Colorado 112.800 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6333 SERIAL #:
T. 0220S., R 0430W., 6TH PM
Sec. 31: SESE;
Prowers County
Colorado 40.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6334 SERIAL #:
T. 0220S., R 0440W., 6TH PM
Sec. 5: NESW,W2SE;
Sec. 8: NWNW;
Prowers County
Colorado 160.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6349 SERIAL #:
T. 0220S., R 0450W., 6TH PM
Sec. 3: NWSE;
Prowers County
Colorado 40.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6350 SERIAL #:
T. 0220S., R 0470W., 6TH PM
Sec. 26: Lot 5-8;
Prowers County

Colorado 67.720 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6351 SERIAL #:
T. 0230S., R 0410W., 6TH PM
Sec. 32: Lot 1,2;
Sec. 32: W2NE;
Prowers County
Colorado 159.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6352 SERIAL #:
T. 0230S., R 0420W., 6TH PM
Sec. 33: NESE;
Prowers County
Colorado 40.000 Acres
BLM; CCDO: RGRA

PARCEL ID: 6353 SERIAL #:
T. 0230S., R 0430W., 6TH PM
Sec. 4: NWSW;
Sec. 5: Lot 4;
Sec. 5: SWNE;
Sec. 10: NESW,SWSE;
Sec. 14: SESE;
Sec. 20: S2NW,W2SW;
Sec. 21: E2SE;
Sec. 24: NWNW;
Sec. 25: SE;
Sec. 29: N2NW;
Sec. 35: NE,N2SE,SESE;
Prowers County
Colorado 1040.260 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6354 SERIAL #:
T. 0230S., R 0430W., 6TH PM
Sec. 26: N2SW,SWSW; U.S. Interest 50.00%
Sec. 27: NW,SE; U.S. Interest 50.00%
Sec. 28: NE; U.S. Interest 50.00%
Sec. 35: NWNW; U.S. Interest 50.00%
Prowers County
Colorado 640.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6355 SERIAL #:
T. 0230S., R 0440W., 6TH PM
Sec. 9: S2SW;
Sec. 14: SENE,SESW,E2SE;

Sec. 15: W2W2;
Sec. 21: NE;
Prowers County
Colorado 560.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6356 SERIAL #:
T. 0230S., R 0450W., 6TH PM
Sec. 11: NWSW;
Sec. 12: S2;
Sec. 31: Lot 1,2;
Sec. 31: E2NW;
Prowers County
Colorado 515.600 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6357 SERIAL #:
T. 0230S., R 0460W., 6TH PM
Sec. 8: SE;
Sec. 9: SW;
Prowers County
Colorado 320.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6358 SERIAL #:
T. 0230S., R 0470W., 6TH PM
Sec. 14: ALL;
Prowers County
Colorado 640.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6359 SERIAL #:
T. 0240S., R 0440W., 6TH PM
Sec. 22: NE;
Prowers County
Colorado 160.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6360 SERIAL #:
T. 0240S., R 0450W., 6TH PM
Sec. 4: SW;
Sec. 22: W2NE,NWSE;
Sec. 24: E2SW;
Sec. 25: NE,E2W2,SWNW;
Sec. 26: SENE,SWSW;
Prowers County
Colorado 800.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6361 SERIAL #:
T. 0240S., R 0460W., 6TH PM
Sec. 15: W2;
Sec. 20: N2NW;
Prowers County
Colorado 400.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6362 SERIAL #:
T. 0240S., R 0470W., 6TH PM
Sec. 22: NWNE;
Sec. 27: SE;
Sec. 34: NE;
Prowers County
Colorado 360.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6537 SERIAL #:
T. 0220S., R 0420W., 6TH PM
Sec. 8: S2S2; U.S. Interest 50.00%
Prowers County
Colorado 160.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6454 SERIAL #:
T. 0080N., R 0580W., 6TH PM
Sec. 35: SE; U.S. Interest 100.00%
Weld County
Colorado 160.000 Acres
PVT/BLM; CCDO: RGRA

PARCEL ID: 6396 SERIAL #:
T. 0100N., R 0560W., 6TH PM
Sec. 15: SWNW,S2SW;
Weld County
Colorado 120.000 Acres
PVT/BLM; CCDO: RGRA

Attachment B - Parcels Available for Lease with Deferred or Dropped Portions

February 2013 - Colorado Competitive Oil & Gas Lease Sale

Available portion of Parcel ID: 6454

None

Deferred PARCEL ID: 6454 SERIAL #:

T. 0080N., R 0580W., 6TH PM
Sec. 35: SE;
U.S. Interest 100.00%
Weld County
Colorado 160.000 Acres
PVT/BLM; CCDO: RGRA

Parcel located in Non-attainment area
Deferred pending further air quality analysis

Available portion of PARCEL ID: 6355 SERIAL #:

None

Deferred Portion of PARCEL ID: 6355 SERIAL #:

T. 0230S., R 0440W., 6TH PM
Sec. 9: S2SW;
Sec. 15: W2W2;
Sec. 21: NE;
Prowers County
Colorado 400.000 Acres
PVT/BLM; CCDO: RGRA

This portion of parcel #6355 was deferred pending conclusion of conferencing with USFWS regarding lesser prairie chicken habitat.

Dropped Portion of PARCEL ID: 6355

T. 0230S., R 0440W., 6TH PM
Sec. 14: SENE,SESW,E2SE;
Prowers County
Colorado 160.000 Acres
PVT/BLM; CCDO: RGRA

This portion of parcel #6355 was dropped from consideration since it conflicts with a national historic site (Camp Amache)

Dropped PARCEL ID: 6289 SERIAL #:

T. 0170S., R 0460W., 6TH PM
Sec. 24: NWNE;
Kiowa County
Colorado 40.000 Acres
PVT/BLM; CCDO: RGRA

This Parcel was dropped from consideration since it would conflict with a national historic site (Sand Creek)

Available portion of Parcel ID: 6482

None

Deferred all of PARCEL ID: 6482 SERIAL #:

T. 0340S., R 0460W., 6TH PM

Sec. 19: Lot 5,6;
Sec. 19: NE,E2NW;
Sec. 22: S2;
Baca County
Colorado 638.970 Acres
PVT/BLM; CCDO: RGRA

This parcel, administered by the USFS, is being sent to the USFS for their consideration.

Available portion of Parcel ID: 6481

None

Deferred portion of Parcel ID: 6481

T. 0340S., R 0460W., 6TH PM
Sec. 9: Lot 7,19,20;
Sec. 16: Lot 1,10,11,17,21,23;
Baca County
Colorado 187.63 Acres
PVT/BLM; CCDO: RGRA

This portion of parcel #6481 was deferred pending conclusion of conferencing with USFWS regarding lesser prairie chicken habitat.

Deferred portion of PARCEL ID: 6481 SERIAL #:

T. 0340S., R 0460W., 6TH PM
Sec. 17: Lot 6;
Baca County
Colorado 22.8 Acres
PVT/BLM; CCDO: RGRA

This portion of parcel #6481, administered by the USFS, is being sent to the USFS for their consideration.

Available portion of Parcel ID: 6484

None

Deferred All of PARCEL ID: 6484 SERIAL #:
T. 0100S., R 0760W., 6TH PM
Sec. 5: Lot 2;
Sec. 5: S2NW,SW;
Sec. 6: Lot 1;
Sec. 6: S2NE;
Sec. 19: Lot 1;
Sec. 19: NWNE,E2NW;
Sec. 28: NW,N2SW;
Sec. 32: E2NW;
Park County

Parcel 6484 has been deferred because of inter-related and overlapping resource concerns identified by internal analysis and public comment.

Colorado 1002.990 Acres
PVT/BLM; CCDO: RGRA

Available portion of Parcel ID: 6485

None

Deferred All of PARCEL ID: 6485 SERIAL #:
T. 0120S., R 0750W., 6TH PM
Sec. 13: SWSW;
Park County
Colorado 40.000 Acres
BLM; CCDO: RGRA

Parcel 6485 has been deferred because of inter-related and overlapping resource concerns identified by internal analysis and public comment.

Available portion of Parcel ID: 6486

None

Deferred All of PARCEL ID: 6486 SERIAL #:
T. 0120S., R 0750W., 6TH PM
Sec. 2: Lot 1-4;
Sec. 2: S2N2;
Sec. 3: Lot 1-3;
Sec. 3: S2NE,E2SE;
Sec. 12: N2S2;
Park County
Colorado 516.670 Acres
PVT/BLM; CCDO: RGRA

Parcel 6486 has been deferred because of inter-related and overlapping resource concerns identified by internal analysis and public comment.

Available portion of Parcel ID: 6487

None

Deferred All of PARCEL ID: 6487 SERIAL #:
T. 0120S., R 0740W., 6TH PM
Sec. 10: S2N2,N2S2;
Sec. 11: N2NE,NW,N2S2;
Park County
Colorado 720.000 Acres
PVT/BLM; CCDO: RGRA

Parcel 6487 has been deferred because of inter-related and overlapping resource concerns identified by internal analysis and public comment.

Available portion of Parcel ID: 6488

None

Deferred All of PARCEL ID: 6488 SERIAL #:
T. 0120S., R 0740W., 6TH PM
Sec. 14: E2NE;
Sec. 19: Lot 1-2;

Parcel 6488 has been deferred because of inter-related and overlapping resource concerns identified by

Sec. 19: S2NE,E2NW;
Sec. 24: NWNW,S2SE;
Park County
Colorado 449.880 Acres
PVT/BLM; CCDO: RGRA

internal analysis and public comment.

Available portion of Parcel ID: 6489

None

Deferred All of PARCEL ID: 6489 SERIAL #:
T. 0120S., R 0740W., 6TH PM
Sec. 33: NESW,SWSE;
Sec. 35: SWSW;
Park County
Colorado 120.000 Acres
BLM; CCDO: RGRA

Parcel 6489 has been deferred because of inter-related and overlapping resource concerns identified by internal analysis and public comment.

Available portion of Parcel ID: 6459

None

Deferred All of PARCEL ID: 6459 SERIAL #:
T. 0160S., R 0480W., 6TH PM
Sec. 32: Lot 13-16;
Cheyenne County
Colorado 161.720 Acres
PVT/BLM; CCDO: RGRA

Parcel #6459 was deferred pending conclusion of conferencing with USFWS regarding lesser prairie chicken habitat.

Available portion of Parcel ID: 6460

None

Deferred All of PARCEL ID: 6460 SERIAL #:
T. 0160S., R 0490W., 6TH PM
Sec. 34: E2NE,N2NW,W2SW,S2SE;
Cheyenne County
Colorado 320.000 Acres
PVT/BLM; CCDO: RGRA

Parcel #6460 was deferred pending conclusion of conferencing with USFWS regarding lesser prairie chicken habitat.

Available portion of Parcel ID: 6461

None

Deferred All of PARCEL ID: 6461 SERIAL #:
T. 0160S., R 0500W., 6TH PM
Sec. 18: Lot 11,16;
Cheyenne County

Parcel #6461 was deferred pending conclusion of conferencing with USFWS regarding

Colorado 78.100 Acres
PVT/BLM; CCDO: RGRA

lesser prairie chicken habitat.

Available portion of Parcel ID: 6462

None

Deferred All of PARCEL ID: 6462 SERIAL #:
T. 0160S., R 0510W., 6TH PM
Sec. 4: Lot 5-12;
Sec. 8: NENE,NWNW,NESW,SESE;
Sec. 10: Lot 1,4,5,8;
Cheyenne County
Colorado 521.630 Acres
PVT/BLM; CCDO: RGRA

Parcel #6462 was deferred pending conclusion of conferencing with USFWS regarding lesser prairie chicken habitat.

Available portion of Parcel ID: 6287

None

Deferred All of PARCEL ID: 6287 SERIAL #:
T. 0170S., R 0490W., 6TH PM
Sec. 2: Lot 1;
Sec. 2: SENE;
Kiowa County
Colorado 79.770 Acres
PVT/BLM; CCDO: RGRA

Parcel #6287 was deferred pending conclusion of conferencing with USFWS regarding lesser prairie chicken habitat.

Available portion of Parcel ID: 6288

None

Deferred All of PARCEL ID: 6288 SERIAL #:
T. 0170S., R 0480W., 6TH PM
Sec. 4: Lot 4;
Sec. 4: S2N2;
Sec. 18: NWNE;
Kiowa County
Colorado 240.440 Acres
PVT/BLM; CCDO: RGRA

Parcel #6288 was deferred pending conclusion of conferencing with USFWS regarding lesser prairie chicken habitat.

Available portion of PARCEL ID: 6367 SERIAL #:
T. 0200S., R 0450W., 6TH PM
Sec. 35: S2SE;
Kiowa County

Colorado 80.000 Acres
PVT/BLM; CCDO: RGRA

Deferred portion of PARCEL ID: 6367 SERIAL #:
T. 0200S., R 0450W., 6TH PM
Sec. 6: Lot 1;
Sec. 6: SENE;
Sec. 19: E2SW;
Sec. 29: SW;
Sec. 30: Lot 1,2;
Sec. 30: E2W2,SE;
Sec. 33: S2NE;
Kiowa County
Colorado 724.200 Acres
PVT/BLM; CCDO: RGRA`

This portion of parcel #6367 was deferred pending conclusion of conferencing with USFWS regarding lesser prairie chicken habitat.

Available portion of PARCEL ID: 6377 SERIAL #:
T. 0190S., R 0460W., 6TH PM
Sec. 28: SENE;
Kiowa County
Colorado 40.000 Acres
PVT/BLM; CCDO: RGRA

Deferred portion of PARCEL ID: 6377 SERIAL #:
T. 0190S., R 0460W., 6TH PM
Sec. 28: N2NE, SENE;
Kiowa County
Colorado 120.000 Acres
PVT/BLM; CCDO: RGRA

This portion of parcel #6377 was deferred pending conclusion of conferencing with USFWS regarding lesser prairie chicken habitat.

Available portion of Parcel ID: 6383

None

Deferred All of PARCEL ID: 6383 SERIAL #:
T. 0180S., R 0460W., 6TH PM
Sec. 18: Lot 1,2;
Kiowa County
Colorado 71.810 Acres
PVT/BLM; CCDO: RGRA

Parcel #6383 was deferred pending conclusion of conferencing with USFWS regarding lesser prairie chicken habitat.

Available portion of PARCEL ID: 6330 SERIAL #:
T. 0210S., R 0450W., 6TH PM
Sec. 12: E2;
Prowers County

Colorado 320.000 Acres
PVT/BLM; CCDO: RGRA

Deferred portion of PARCEL ID: 6330 SERIAL #:
T. 0210S., R 0450W., 6TH PM
Sec. 17: E2W2,SWSE;
Prowers County
Colorado 200.000 Acres
PVT/BLM; CCDO: RGRA

This portion of parcel #6330 was deferred pending conclusion of conferencing with USFWS regarding lesser prairie chicken habitat.

Available portion of Parcel ID: 6349

None

Deferred All of PARCEL ID: 6349 SERIAL #:
T. 0220S., R 0450W., 6TH PM
Sec. 3: NWSE;
Prowers County
Colorado 40.000 Acres
PVT/BLM; CCDO: RGRA

Parcel #6349 was deferred pending conclusion of conferencing with USFWS regarding lesser prairie chicken habitat.

Available portion of Parcel ID: 6351

None

Deferred All of PARCEL ID: 6351 SERIAL #:
T. 0230S., R 0410W., 6TH PM
Sec. 32: Lot 1,2;
Sec. 32: W2NE;
Prowers County
Colorado 159.000 Acres
PVT/BLM; CCDO: RGRA

Parcel #6351 was deferred pending conclusion of conferencing with USFWS regarding lesser prairie chicken habitat.

Available portion of Parcel ID: 6352

None

Deferred All of PARCEL ID: 6352 SERIAL #:
T. 0230S., R 0420W., 6TH PM
Sec. 33: NESE;
Prowers County
Colorado 40.000 Acres
BLM; CCDO: RGRA

Parcel #6352 was deferred pending conclusion of conferencing with USFWS regarding lesser prairie chicken habitat.

Available portion of PARCEL ID: 6353 SERIAL #:
T. 0230S., R 0430W., 6TH PM
Sec. 4: NWSW;
Sec. 5: Lot 4;
Sec. 5: SWNE;
Sec. 10: NESW,SWSE;
Prowers County
Colorado 200.260 Acres
PVT/BLM; CCDO: RGRA

Deferred portion of PARCEL ID: 6353 SERIAL #:
T. 0230S., R 0430W., 6TH PM
Sec. 14: SESE;
Sec. 20: S2NW,W2SW;
Sec. 21: E2SE;
Sec. 24: NWNW;
Sec. 25: SE;
Sec. 29: N2NW;
Sec. 35: NE,N2SE,SESE;
Prowers County
Colorado 840.000 Acres
PVT/BLM; CCDO: RGRA

This portion of parcel #6353 was deferred pending conclusion of conferencing with USFWS regarding lesser prairie chicken habitat.

Available portion of Parcel ID: 6354

None

Deferred All of PARCEL ID: 6354 SERIAL #:
T. 0230S., R 0430W., 6TH PM
Sec. 26: N2SW,SWSW; U.S. Interest 50.00%
Sec. 27: NW,SE; U.S. Interest 50.00%
Sec. 28: NE; U.S. Interest 50.00%
Sec. 35: NWNW; U.S. Interest 50.00%
Prowers County
Colorado 640.000 Acres
PVT/BLM; CCDO: RGRA

Parcel #6354 was deferred pending conclusion of conferencing with USFWS regarding lesser prairie chicken habitat.

Available portion of PARCEL ID: 6356 SERIAL #:
T. 0230S., R 0450W., 6TH PM
Sec. 31: Lot 1,2;
Sec. 31: E2NW;
Prowers County
Colorado 155.600 Acres
PVT/BLM; CCDO: RGRA

Deferred portion of PARCEL ID: 6356 SERIAL #:

T. 0230S., R 0450W., 6TH PMSec. 11: NWSW;
Sec. 12: S2;
Prowers County
Colorado 360.000 Acres
PVT/BLM; CCDO: RGRA

This portion of parcel #6356 was deferred pending conclusion of conferencing with USFWS regarding lesser prairie chicken habitat.

Available portion of Parcel ID: 6357

None

Deferred All of PARCEL ID: 6357 SERIAL #:

T. 0230S., R 0460W., 6TH PM
Sec. 8: SE;
Sec. 9: SW;
Prowers County
Colorado 320.000 Acres
PVT/BLM; CCDO: RGRA

Parcel #6357 was deferred pending conclusion of conferencing with USFWS regarding lesser prairie chicken habitat.

Available portion of Parcel ID: 6358

None

Deferred All of PARCEL ID: 6358 SERIAL #:

T. 0230S., R 0470W., 6TH PM
Sec. 14: ALL;
Prowers County
Colorado 640.000 Acres
PVT/BLM; CCDO: RGRA

Parcel #6358 was deferred pending conclusion of conferencing with USFWS regarding lesser prairie chicken habitat.

Available portion of Parcel ID: 6359

None

Deferred All of PARCEL ID: 6359 SERIAL #:

T. 0240S., R 0440W., 6TH PM
Sec. 22: NE;
Prowers County
Colorado 160.000 Acres
PVT/BLM; CCDO: RGRA

Parcel #6359 was deferred pending conclusion of conferencing with USFWS regarding lesser prairie chicken habitat.

Available portion of Parcel ID: 6360

None

Deferred All of PARCEL ID: 6360 SERIAL #:
T. 0240S., R 0450W., 6TH PM
Sec. 4: SW;
Sec. 22: W2NE,NWSE;
Sec. 24: E2SW;
Sec. 25: NE,E2W2,SWNW;
Sec. 26: SENE,SWSW;
Prowers County
Colorado 800.000 Acres
PVT/BLM; CCDO: RGRA

Parcel #6360 was deferred pending conclusion of conferencing with USFWS regarding lesser prairie chicken habitat.

Attachment C - Parcels Available for Lease with Applied Stipulations

February 2013 - Colorado Competitive Oil & Gas Lease Sale

[NOTE: All lands in the Parcels listed below will also carry stipulation CO-39 to protect historic properties and/or resources under the National Historic Preservation Act, American Indian Religious Freedom Act, Native American Graves Protection and Repatriation Act, E.O.13007, or other statutes and executive orders.]

RGFO February 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: 6490 SERIAL #:
T. 0210S., R 0510W., 6TH PM
Sec. 19: Lot 3,4; U.S. Interest 50.00%
Sec. 19: E2SW,SE; U.S. Interest 50.00%
Bent County
Colorado 320.910 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6491 SERIAL #:

T. 0210S., R 0510W., 6TH PM
Sec. 1: Lot 6;
Sec. 2: Lot 1,2,6,8,9;
Sec. 2: SW;
Sec. 6: Lot 1-4;
Sec. 25: SESE;
Sec. 31: S2SE;
Sec. 32: S2SW;
Sec. 34: SENE;
Sec. 35: SWNW,NWSW;
Bent County
Colorado 921.950 Acres
PVT/BLM;BLM; CCDO: RGRA

The following lands are subject to Exhibit CO-28 to protect water impoundments/streams/wetlands
Sec. 25: SESE;
Sec. 35: SWNW, NWSW;
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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6492 SERIAL #:
T. 0210S., R 0500W., 6TH PM
Sec. 29: S2SE;
Sec. 35: SW;
Bent County
Colorado 240.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.
The following lands are subject to Exhibit CO-28 to protect water impoundments/streams/wetlands
Sec. 35: SW;

PARCEL ID: 6493 SERIAL #:
T. 0220S., R 0480W., 6TH PM
Sec. 22: S2NE,N2SE; U.S. Interest 50.00%
Bent County
Colorado 160.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6494 SERIAL #:
T. 0220S., R 0480W., 6TH PM
Sec. 25: Lot 2;

Bent County
Colorado 8.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6495 SERIAL #:
T. 0220S., R 0500W., 6TH PM
Sec. 2: Lot 3,4;
Sec. 2: S2NW;
Sec. 5: SESW,SWSE;
Sec. 6: Lot 6,7;
Sec. 8: NE,N2NW,N2SE;
Sec. 9: SWNE,SENW;
Sec. 12: W2NE,NW,SW;
Sec. 15: E2;
Bent County
Colorado 1451.200 Acres
PVT/BLM; CCDO: RGRA

The following lands are subject to Exhibit CO-28 to protect water impoundments/streams/wetlands
Sec. 5: SESW, SWSE;
Sec. 8: NE, N2NW, N2SE;
Sec. 9: SWNE, SENW;
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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6496 SERIAL #:
T. 0220S., R 0510W., 6TH PM
Sec. 1: Lot 1,2;

Sec. 1: S2NE,N2SE;
Sec. 2: Lot 2;
Sec. 2: S2NE,NWSE;
Sec. 4: Lot 4;
Sec. 10: S2NE;
Bent County
Colorado 529.170 Acres
PVT/BLM; CCDO: RGRA

The following lands are subject to Exhibit RG-10 to protect bald eagle wintering habitat:
Sec. 2: Lot 2, SENE, NWSE;
The following lands are subject to Exhibit CO-28 to protect water impoundments/streams/wetlands
Sec. 1: LOT 1,2;
Sec. 1: S2NE, NWSE;
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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6497 SERIAL #:
T. 0220S., R 0520W., 6TH PM
Sec. 11: SE;
Sec. 17: S2N2,N2S2;
Sec. 22: SWSW;
Bent County
Colorado 520.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6498 SERIAL #:
T. 0230S., R 0480W., 6TH PM
Sec. 1: S2SE;
Bent County
Colorado 80.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6499 SERIAL #:
T. 0230S., R 0490W., 6TH PM
Sec. 1: Lot 1-3;
Sec. 9: NENE;
Sec. 10: NWNW;
Bent County
Colorado 126.110 Acres
PVT/BLM;BLM; CCDO: RGRA

The following lands are subject to Exhibit CO-07 to protect waterfowl and shorebird habitat and rookeries within significant production areas:
Sec. 1: Lot 1-3;
The following lands are subject to Exhibit RG-10 to protect bald eagle wintering habitat:
Sec. 1: Lot 1-3;
The following lands are subject to Exhibit CO-28 to protect water impoundments/streams/wetlands
Sec. 1: Lot 1-3;
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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6500 SERIAL #:
T. 0230S., R 0490W., 6TH PM
Sec. 13: Lot 3,4;
Sec. 13: SWSW;
Sec. 14: N2N2,SWNW,NWSW;
Sec. 15: N2NE,SWNW,W2SW;
Bent County
Colorado 490.670 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6501 SERIAL #:
T. 0250S., R 0520W., 6TH PM
Sec. 2: SENE;
Sec. 7: Lot 1-4;
Sec. 7: E2W2;
Sec. 15: NESE,N2SE;
Sec. 19: Lot 1-4;

Sec. 19: E2W2;
Bent County
Colorado 804.360 Acres
PVT/BLM; CCDO: RGRA

The following lands are subject to Exhibit CO-28 to protect water impoundments/streams/wetlands
Sec. 19: Lot 1-4;
Sec. 19: E2W2;
The following lands are subject to Exhibit CO-09 to protect big game winter range:
Sec. 2: SENE;
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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6502 SERIAL #:
T. 0240S., R 0480W., 6TH PM
Sec. 25: SE;
Sec. 35: SW;
Bent County
Colorado 320.000 Acres
PVT/BLM; CCDO: RGRA

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.
The following lands are subject to Exhibit CO-28 to protect water impoundments/streams/wetlands
Sec. 25: SE;
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 RG-05 to protect raptor habitat.

PARCEL ID: 6503 SERIAL #:
T. 0240S., R 0490W., 6TH PM
Sec. 2: Lot 4;
Sec. 2: SWNW,W2SW;
Sec. 11: E2NW,NWSW;
Sec. 13: NENW;
Sec. 15: S2NE;
Sec. 27: SWNE,W2SE,SESW;
Sec. 32: N2SW;
Bent County
Colorado 640.150 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6504 SERIAL #:
T. 0240S., R 0500W., 6TH PM
Sec. 1: NESW;
Sec. 12: SENE,SWNW;
Sec. 14: W2;
Sec. 15: E2SE;
Sec. 27: SWNW,W2SW;
Sec. 32: SE;
Bent County
Colorado 800.000 Acres
PVT/BLM; CCDO: RGRA

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.
The following lands are subject to Exhibit CO-28 to protect water impoundments/streams/wetlands
Sec. 14 W2
Sec. 15 E2SE
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 RG-05 to protect raptor habitat.

PARCEL ID: 6505 SERIAL #:
T. 0240S., R 0510W., 6TH PM
Sec. 1: Lot 1;
Sec. 5: SESE;
Sec. 8: NWNE;
Sec. 12: N2NE,SWNE,NENW;
Sec. 13: SWNW,S2SW;
Sec. 18: W2NE,N2SE;
Sec. 21: NE;
Sec. 26: E2, E2NW;
Sec. 27: W2SW;
Sec. 29: W2NE;
Sec. 34: NENE,W2NW;
Sec. 35: SW;
Bent County
Colorado 1560.080 Acres
PVT/BLM; CCDO: RGRA

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.
The following lands are subject to Exhibit CO-28 to protect water impoundments/streams/wetlands
Sec. 26: E2, E2NW;

Sec. 34: NENE;
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 RG-05 to protect raptor habitat.

PARCEL ID: 6506 SERIAL #:
T. 0240S., R 0520W., 6TH PM
Sec. 13: SESW;
Sec. 14: SESW;
Sec. 19: Lot 1-4;
Sec. 19: SENE,NESE;
Sec. 22: SENE,NESE;
Sec. 31: E2SE,SWSE;
Sec. 34: NENW,SESW;
Bent County
Colorado 612.800 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6507 SERIAL #:
T. 0250S., R 0480W., 6TH PM
Sec. 11: NE;
Sec. 13: NE;
Sec. 18: Lot 1-4;
Sec. 18: E2W2;
Sec. 32: S2;
Bent County
Colorado 955.280 Acres
PVT/BLM; CCDO: RGRA

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-28 to protect water impoundments/streams/wetlands
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 RG-05 to protect raptor habitat.

PARCEL ID: 6508 SERIAL #:
T. 0250S., R 0490W., 6TH PM
Sec. 2: SENW;
Sec. 8: SESW;

Sec. 12: NENW;
Sec. 15: SW;
Sec. 17: E2NW;
Sec. 18: Lot 1;
Sec. 21: NESE,S2SE;
Sec. 22: N2NW,S2SW;
Sec. 24: SW;
Sec. 28: E2SW;
Sec. 30: Lot 4;
Sec. 30: SESW;
Sec. 32: SW;
Sec. 33: NE,E2NW;
Bent County
Colorado 1384.700 Acres
PVT/BLM; CCDO: RGRA

All lands are subject to Exhibit CO-26, CSU stipulation to protect fragile soils.
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-28 to protect water impoundments/streams/wetlands
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 RG-05 to protect raptor habitat.

PARCEL ID: 6509 SERIAL #:
T. 0250S., R 0500W., 6TH PM
Sec. 32: E2NE,S2NW,N2SW,SWSE;
Sec. 33: SWNW,SESW;
Sec. 34: E2E2;
Bent County
Colorado 520.000 Acres
PVT/BLM; CCDO: RGRA

All lands are subject to Exhibit CO-26, CSU stipulation to protect fragile soils.
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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6510 SERIAL #:
T. 0250S., R 0500W., 6TH PM
Sec. 3: Lot 1-4;
Sec. 4: SENE;
Sec. 8: SE;
Sec. 10: NE,E2NW,NWNW,E2SE;
Sec. 15: SENW,SWSW,E2SW;

Sec. 20: NWSE;
Sec. 22: N2NE,NENW,NWSW,S2SW;
Sec. 22: SESE;
Sec. 26: W2;
Sec. 27: E2,NW,NESW,S2SW;
Sec. 31: E2NE,NESE;
Bent County
Colorado 2245.930 Acres
PVT/BLM; CCDO: RGRA

All lands are subject to Exhibit CO-26, CSU stipulation to protect fragile soils.
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-28 to protect water impoundments/streams/wetlands
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 RG-05 to protect raptor habitat.

PARCEL ID: 6511 SERIAL #:
T. 0250S., R 0510W., 6TH PM
Sec. 2: Lot 1-4;
Sec. 2: S2N2,S2;
Sec. 3: SENW,NESE;
Sec. 11: E2;
Bent County
Colorado 972.000 Acres
PVT/BLM; CCDO: RGRA

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-28 to protect water impoundments/streams/wetlands
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 RG-05 to protect raptor habitat.

PARCEL ID: 6512 SERIAL #:
T. 0250S., R 0510W., 6TH PM
Sec. 19: SENE;
Sec. 20: NENE,SE;
Sec. 21: E2SE;
Sec. 28: NENE,SWSE;
Sec. 29: NENE,W2NE,SW;
Sec. 30: Lot 1,2;
Sec. 30: SESW;
Sec. 31: Lot 1,2;
Sec. 31: W2NE,E2NW;
Sec. 32: S2NE,E2NW,S2;

Sec. 33: NE,S2NW,S2;
Sec. 34: N2SW,SE;
Bent County
Colorado 2321.720 Acres
PVT/BLM; CCDO: RGRA

All lands are subject to Exhibit CO-26, CSU stipulation to protect fragile soils.
All lands are subject to Exhibit CO-09 to protect big game winter range.
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.
The following lands are subject to Exhibit CO-28 to protect water impoundments/streams/wetlands
Sec. 29: SW
Sec. 30: Lot 1, 2,
Sec. 30: SESW
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 RG-05 to protect raptor habitat.

PARCEL ID: 6515 SERIAL #:
T. 0230S., R 0520W., 6TH PM
Sec. 19: Lot 1,2;
Sec. 19: NENW;
Sec. 25: NENE;
Sec. 28: NE,E2NW,NWNW;
Sec. 29: NENW,W2W2;
Sec. 30: E2NW;
Sec. 31: SWSE;
Sec. 33: SWSE;
Sec. 34: SESE;
Bent County
Colorado 840.150 Acres
PVT/BLM; CCDO: RGRA

The following lands are subject to Exhibit CO-28 to protect water impoundments/streams/wetlands
Sec. 33: SWSE;
The following lands are subject to Exhibit RG-10 to protect bald eagle wintering habitat:
Sec. 28: NE;
Sec. 33: SWSE;

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6516 SERIAL #:
T. 0230S., R 0510W., 6TH PM

Sec. 25: N2NE,SENE,NWSW,SESE;
Sec. 26: NE,NESW,N2SE;
Sec. 27: NW,E2SW,NESE,W2SE;
Sec. 34: W2NE,E2NW;
Sec. 35: N2NW,N2SW;
Bent County
Colorado 1160.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6517 SERIAL #:
T. 0230S., R 0510W., 6TH PM
Sec. 22: ALL;
Sec. 23: N2,N2S2;
Sec. 24: ALL;
Bent County
Colorado 1760.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6518 SERIAL #:
T. 0230S., R 0510W., 6TH PM
Sec. 21: N2,SW,N2SE,SWSE;
Sec. 28: E2,E2W2,W2SW;
Sec. 33: W2NW;
Bent County
Colorado 1240.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6519 SERIAL #:

T. 0230S., R 0510W., 6TH PM
Sec. 20: NENE,S2NE,NESW,SE;
Sec. 29: W2NW,N2SW;
Sec. 30: Lot 1,2;
Sec. 30: NE,E2NW;
Sec. 31: Lot 1,2;
Sec. 31: E2NW;
Bent County
Colorado 959.350 Acres
PVT/BLM; CCDO: RGRA
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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6520 SERIAL #:
T. 0230S., R 0510W., 6TH PM
Sec. 11: NENE,S2NE,NESW,SE;
Sec. 12: NWNE,S2NE,NW,S2;
Sec. 13: N2N2,S2S2;
Sec. 14: NE,S2;
Sec. 15: S2NE,NESW,S2SW,SE;
Bent County
Colorado 2080.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6521 SERIAL #:
T. 0230S., R 0500W., 6TH PM
Sec. 29: W2NW;
Sec. 30: SENE,SE;
Sec. 31: NENW;
Bent County
Colorado 320.000 Acres
PVT/BLM; CCDO: RGRA

The following lands are subject to Exhibit RG-10 to protect bald eagle wintering habitat:
Sec. 29: NWNW;
Sec. 30: SENE;

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6522 SERIAL #:
T. 0230S., R 0500W., 6TH PM
Sec. 17: S2N2NWNW,S2NWNW,SWNW;
Sec. 18: Lot 1-4;
Sec. 18: E2,E2W2;
Sec. 19: Lot 1-4;
Sec. 19: NE,E2NW,NESW,NWSE;
Bent County
Colorado 1153.200 Acres
PVT/BLM; CCDO: RGRA

The following lands are subject to Exhibit CO-17 to protect white pelican nesting and feeding habitat during usage:
Sec. 17: W2NW;
Sec. 18: NENE;
Sec. 19: SENE,NESW;

The following lands are subject to Exhibit RG-10 to protect bald eagle wintering habitat:
Sec. 17: W2NW;
Sec. 18: NENE,E2SW;
Sec. 19: NE,SENW,NWSE,N2SW,SWSW;

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6523 SERIAL #:
T. 0230S., R 0500W., 6TH PM
Sec. 22: E2NE;
Bent County
Colorado 80.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6524 SERIAL #:

T. 0230S., R 0500W., 6TH PM
Sec. 23: N2,N2SW,SE;
Sec. 24: N2,SW,N2SE,SWSE;
Sec. 25: NWNE,NENW;
Bent County
Colorado 1240.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6534 SERIAL #:
T. 0210S., R 0520W., 6TH PM
Sec. 19: NE;
Sec. 21: NW;
Bent County
Colorado 320.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6535 SERIAL #:
T. 0230S., R 0490W., 6TH PM
Sec. 19: Lot 3;
Sec. 20: E2NENW,SWNW;
Bent County
Colorado 78.380 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6538 SERIAL #:
T. 0230S., R 0510W., 6TH PM
Sec. 1: PART OF THE S2;
Sec. 1: OF RR ROW COC0120033;

Bent County
Colorado 182.000 Acres
PVT/BLM; CCDO: RGRA

All lands are subject to Exhibit CO-23 to protect bald eagle winter roost sites.
All lands are subject to Exhibit RG-10 to protect bald eagle wintering habitat.
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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6305 SERIAL #:
T. 0250S., R 0530W., 6TH PM
Sec. 34: ALL;
Sec. 35: ALL;
Bent County
Colorado 1280.000 Acres
PVT/BLM; CCDO: RGRA

All lands are subject to Exhibit CO-26, CSU stipulation to protect fragile soils.
All lands are subject to Exhibit CO-09 to protect big game winter range.
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-28 to protect water impoundments/streams/wetlands
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 RG-05 to protect raptor habitat.

PARCEL ID: 6306 SERIAL #:
T. 0250S., R 0530W., 6TH PM
Sec. 28: N2NW;
Sec. 29: N2NE,SW,W2SE,SESE;
Sec. 30: Lots 3,4
Sec. 30: E2SW,SE;
Sec. 32: NE,W2;
Sec. 33: E2;
Bent County
Colorado 1557.6000 Acres
PVT/BLM; CCDO: RGRA

The following lands are subject to Exhibit CO-26, CSU stipulation to protect fragile soils.
Sec. 29: N2NE, SW, W2SE, SESE;
Sec. 32: NE, W2;
Sec. 33: E2;
The following lands are subject to Exhibit CO-09 to protect big game winter range:

Sec. 28: NENW;
Sec. 32: NE,W2;
Sec. 33: E2;

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.
The following lands are subject to Exhibit CO-28 to protect water impoundments/streams/wetlands
Sec. 32: NE, W2;
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 RG-05 to protect raptor habitat.

PARCEL ID: 6307 SERIAL #:
T. 0250S., R 0530W., 6TH PM
Sec. 22: S2NW,N2S2;
Sec. 23: SENE, E2SE, NWSE;
Sec. 24: N2, SW;
Sec. 25: W2;
Sec. 26: E2E2, SWNE, SESW, W2SE;
Sec. 27: W2NW, S2SW, SESE;
Bent County
Colorado 1720.000 Acres
PVT/BLM; CCDO: RGRA

The following lands are subject to Exhibit CO-26, CSU stipulation to protect fragile soils.
Sec. 27: SESE, W2NW;
The following lands are subject to Exhibit CO-09 to protect big game winter range:
Sec. 22: N2SE,N2SW;
Sec. 23: NWSE,SESE;
Sec. 24: SWSW;
Sec. 25: W2;
Sec. 26: NENE,S2NE,SE,SESW;
Sec. 27: W2NW,S2SW,SESE;
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-28 to protect water impoundments/streams/wetlands
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 RG-05 to protect raptor habitat.

PARCEL ID: 6308 SERIAL #:
T. 0250S., R 0530W., 6TH PM
Sec. 20: NESW;
Sec. 21: W2;
Bent County
Colorado 360.000 Acres
PVT/BLM; CCDO: RGRA

The following lands are subject to Exhibit CO-09 to protect big game winter range:
Sec. 21: SESW;

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6309 SERIAL #:
T. 0250S., R 0530W., 6TH PM
Sec. 17: S2;
Sec. 18: Lot 1,2;
Sec. 18: NE,E2NW;
Bent County
Colorado 636.600 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6310 SERIAL #:
T. 0250S., R 0530W., 6TH PM
Sec. 10: SWSW;
Sec. 11: N2NE,E2NW;
Sec. 12: E2NE,NWNW,E2SW,SE;
Sec. 13: NE,E2NW,NWNW;
Sec. 14: SWNW;
Sec. 15: E2NE,SWNE,W2NW,SENW;
Sec. 15: NESE;
Bent County
Colorado 1160.000 Acres
PVT/BLM; CCDO: RGRA

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.
The following lands are subject to Exhibit CO-28 to protect water impoundments/streams/wetlands
Sec. 11: N2NW;
Sec. 12: NWNW,E2SW;

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 RG-05 to protect raptor habitat.

PARCEL ID: 6311 SERIAL #:
T. 0250S., R 0530W., 6TH PM
Sec. 5: Lot 1-4;
Sec. 5: S2N2,S2;
Sec. 6: Lot 1;
Sec. 6: SENE,SESW,NESE,S2SE;
Sec. 7: Lot 3,4;
Sec. 7: NE,E2SW,SE;
Bent County
Colorado 1352.000 Acres
PVT/BLM; CCDO: RGRA

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-28 to protect water impoundments/streams/wetlands
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 RG-05 to protect raptor habitat.

PARCEL ID: 6312 SERIAL #:
T. 0250S., R 0530W., 6TH PM
Sec. 1: Lot 3,4;
Sec. 1: S2NW,W2SW,SWSE;
Sec. 2: W2SW;
Bent County
Colorado 359.550 Acres
PVT/BLM; CCDO: RGRA

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-28 to protect water impoundments/streams/wetlands
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 RG-05 to protect raptor habitat.

PARCEL ID: 6313 SERIAL #:
T. 0240S., R 0530W., 6TH PM
Sec. 19: E2;
Sec. 20: NENE,W2NE,NW,N2S2;
Sec. 21: E2NW;
Sec. 28: N2;
Sec. 30: Lot 1-4;
Sec. 30: E2,E2W2;
Sec. 33: SE;
Sec. 34: SW;

Bent County
Colorado 2113.600 Acres
PVT/BLM; CCDO: RGRA

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.
The following lands are subject to Exhibit CO-28 to protect water impoundments/streams/wetlands
Sec. 19: E2;
Sec. 20: NENE,W2NE,NW,N2S2;
Sec. 30: Lot 1-4;
Sec. 30: E2,E2W2;
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 RG-05 to protect raptor habitat.

PARCEL ID: 6314 SERIAL #:
T. 0240S., R 0530W., 6TH PM
Sec. 5: SW;
Sec. 6: SE;
Sec. 7: Lot 1-4;
Sec. 7: E2,E2W2;
Sec. 8: ALL;
Sec. 11: NE;
Sec. 18: Lot 1-4;
Sec. 18: E2,E2W2;
Bent County
Colorado 2375.200 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6315 SERIAL #:
T. 0230S., R 0530W., 6TH PM
Sec. 29: N2,N2SE;
Sec. 30: E2;
Sec. 31: Lot 3,4;
Sec. 32: NESE,S2SE;
Bent County
Colorado 912.250 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6316 SERIAL #:
T. 0230S., R 0530W., 6TH PM
Sec. 28: N2,N2SW;
Bent County
Colorado 400.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6317 SERIAL #:
T. 0230S., R 0530W., 6TH PM
Sec. 25: N2;
Sec. 26: N2;
Bent County
Colorado 640.000 Acres
PVT/BLM; CCDO: RGRA

All lands are subject to Exhibit CO-26, CSU stipulation to protect fragile soils.
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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6318 SERIAL #:
T. 0230S., R 0530W., 6TH PM
Sec. 24: ALL;
Bent County
Colorado 640.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6319 SERIAL #:
T. 0230S., R 0530W., 6TH PM
Sec. 23: ALL;
Bent County
Colorado 640.000 Acres
PVT/BLM; CCDO: RGRA

All lands are subject to Exhibit CO-26, CSU stipulation to protect fragile soils.
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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6320 SERIAL #:
T. 0230S., R 0530W., 6TH PM
Sec. 21: ALL;
Sec. 22: E2;
Bent County
Colorado 960.000 Acres
PVT/BLM; CCDO: RGRA

All lands are subject to Exhibit CO-26, CSU stipulation to protect fragile soils.
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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6321 SERIAL #:
T. 0230S., R 0530W., 6TH PM
Sec. 17: SENE,SWSW;
Sec. 19: E2,E2SW;
Sec. 20: E2,NWNW,S2NW,SW;
Bent County
Colorado 1080.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6322 SERIAL #:
T. 0230S., R 0530W., 6TH PM

Sec. 15: W2;
Bent County
Colorado 320.000 Acres
PVT/BLM; CCDO: RGRA

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-28 to protect water impoundments/streams/wetlands
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 RG-05 to protect raptor habitat.

PARCEL ID: 6323 SERIAL #:
T. 0230S., R 0530W., 6TH PM
Sec. 13: S2;
Sec. 14: S2NE,S2;
Bent County
Colorado 720.000 Acres
PVT/BLM; CCDO: RGRA

All lands are subject to Exhibit CO-26, CSU stipulation to protect fragile soils.
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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6324 SERIAL #:
T. 0220S., R 0530W., 6TH PM
Sec. 5: Lot 3,4;
Sec. 5: S2NW;
Sec. 8: S2NW;
Sec. 17: NW;
Sec. 18: Lot 1,2;
Sec. 18: E2NW;
Sec. 20: NENW;
Sec. 28: N2NWNW;
Bent County
Colorado 609.730 Acres
PVT/BLM; CCDO: RGRA

The following lands are subject to Exhibit CO-09 to protect big game winter range: (Mule Deer)
Sec. 5: Lot 3,4:
Sec. 5: S2NW;

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6325 SERIAL #:
T. 0210S., R 0530W., 6TH PM
Sec. 2: Lot 6;
Sec. 4: Lot 3-5;
Bent County
Colorado 217.400 Acres
PVT/BLM; CCDO: RGRA

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.
The following lands are subject to Exhibit CO-28 to protect water impoundments/streams/wetlands
Sec. 2: Lot 6;
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 RG-05 to protect raptor habitat.

PVT/BLM; CCDO: RGRA

PARCEL ID: 6455 SERIAL #:
T. 0120S., R 0420W., 6TH PM
Sec. 34: Lot 1,2;
Cheyenne County
Colorado 79.060 Acres
PVT/BLM; CCDO: RGRA

All lands are subject to Exhibit CO-29 to alert lessee of paleontological area inventory requirement.
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-28 to protect water impoundments/streams/wetlands
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 RG-05 to protect raptor habitat.

PARCEL ID: 6456 SERIAL #:
T. 0160S., R 0440W., 6TH PM
Sec. 2: Lot 5,9,12;
Cheyenne County
Colorado 170.880 Acres
PVT/BLM; CCDO: RGRA
All lands are subject to Exhibit CO-29 to alert lessee of paleontological area inventory requirement.
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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6457 SERIAL #:
T. 0160S., R 0450W., 6TH PM
Sec. 4: Lot 12;
Sec. 28: Lot 5,6;
Cheyenne County
Colorado 144.130 Acres
PVT/BLM; CCDO: RGRA

All lands are subject to Exhibit CO-29 to alert lessee of paleontological area inventory requirement.
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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6460 SERIAL #:
T. 0160S., R 0490W., 6TH PM
Sec. 34: E2NE,N2NW,W2SW,S2SE;
Cheyenne County
Colorado 320.000 Acres
PVT/BLM; CCDO: RGRA

All lands are subject to Exhibit CO-30 to protect nesting grouse.
All lands are subject to Exhibit RG-03 to protect lesser prairie chicken habitat.
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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6463 SERIAL #:
T. 0120S., R 0430W., 6TH PM
Sec. 34: Lot 3-6,9-12; U.S. Interest 50.00%
Cheyenne County
Colorado 312.050 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6465 SERIAL #:
T. 0130S., R 0450W., 6TH PM
Sec. 8: Lot 3-6,11-14; U.S. Interest 50.00%
Cheyenne County
Colorado 321.500 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6466 SERIAL #:

T. 0130S., R 0470W., 6TH PM
Sec. 2: Lot 5-12; U.S. Interest 50.00%
Cheyenne County
Colorado 322.610 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6467 SERIAL #:
T. 0150S., R 0430W., 6TH PM
Sec. 14: E2; U.S. Interest 50.00%
Cheyenne County
Colorado 320.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6468 SERIAL #:
T. 0140S., R 0480W., 6TH PM
Sec. 2: Lot 16,17;
Cheyenne County

Colorado 79.530 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6469 SERIAL #:
T. 0120S., R 0440W., 6TH PM
Sec. 6: Lot 11;
Cheyenne County
Colorado 44.970 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6470 SERIAL #:
T. 0120S., R 0420W., 6TH PM
Sec. 2: Lot 20;
Cheyenne County
Colorado 40.760 Acres
PVT/BLM; CCDO: RGRA

All lands are subject to Exhibit CO-29 to alert lessee of paleontological area inventory requirement.
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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6342 SERIAL #:
T. 0180S., R 0560W., 6TH PM
Sec. 20: SENE;
Crowley County
Colorado 40.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6343 SERIAL #:
T. 0190S., R 0560W., 6TH PM
Sec. 34: E2SW;
Crowley County
Colorado 80.000 Acres
BLM; CCDO: RGRA

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-28 to protect water impoundments/streams/wetlands
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 RG-05 to protect raptor habitat.

PARCEL ID: 6414 SERIAL #:
T. 0220S., R 0560W., 6TH PM
Sec. 10: NWNE;
Crowley County
Colorado 40.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6415 SERIAL #:
T. 0210S., R 0550W., 6TH PM
Sec. 12: W2SE;
Crowley County
Colorado 80.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6416 SERIAL #:
T. 0190S., R 0550W., 6TH PM
Sec. 33: Lot 3,4;

T. 0200S., R 0550W., 6TH PM
Sec. 4: Lot 5,9;
Crowley County
Colorado 128.580 Acres
PVT/BLM; CCDO: RGRA

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-28 to protect water impoundments/streams/wetlands
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 RG-05 to protect raptor habitat.

PARCEL ID: 6417 SERIAL #:
T. 0200S., R 0560W., 6TH PM
Sec. 30: NE;
Crowley County
Colorado 160.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6472 SERIAL #:
T. 0190S., R 0560W., 6TH PM
Sec. 25: E2;
Sec. 35: SE;
T. 0200S., R 0560W., 6TH PM
Sec. 2: Lot 1,2;
Sec. 2: S2NE;
Crowley County
Colorado 641.080 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6290 SERIAL #:
T. 0170S., R 0420W., 6TH PM
Sec. 4: Lot 1-4; U.S. Interest 25.00%

Sec. 4: S2N2,S2; U.S. Interest 25.00%
Kiowa County
Colorado 651.960 Acres
BLM; CCDO: RGRA

All lands are subject to Exhibit CO-29 to alert lessee of paleontological area inventory requirement.
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-28 to protect water impoundments/streams/wetlands
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 RG-05 to protect raptor habitat.

PARCEL ID: 6291 SERIAL #:
T. 0170S., R 0420W., 6TH PM
Sec. 26: S2NE;
Kiowa County
Colorado 80.000 Acres
PVT/BLM; CCDO: RGRA

All lands are subject to Exhibit CO-29 to alert lessee of paleontological area inventory requirement.
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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6335 SERIAL #:
T. 0200S., R 0540W., 6TH PM
Sec. 4: Lot 5-10;
Sec. 5: Lot 5,6;
Sec. 6: Lot 8-10;
Sec. 7: Lot 5,6 ;
Sec. 7: E2NE;
Sec. 27: SWSW;
Sec. 27: EXCL RR ROW;
Sec. 33: S2NE;
Kiowa County
Colorado 421.570 Acres
PVT/BLM; CCDO: RGRA

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.
The following lands are subject to Exhibit CO-28 to protect water impoundments/streams/wetlands
Sec. 7: Lot 5, 6;
Sec. 7: E2NE;
Sec. 27: SWSW;

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 RG-05 to protect raptor habitat.

PARCEL ID: 6363 SERIAL #:
T. 0200S., R 0520W., 6TH PM
Sec. 17: E2NE;
Sec. 29: E2SW;
Sec. 29: EXCL RW P-01827;
Kiowa County
Colorado 99.720 Acres
PVT/BLM; CCDO: RGRA

The following lands are subject to Exhibit CO-04 to protect bald eagle roosts and nests:
Sec. 29: E2SW;

The following lands are subject to Exhibit CO-09 to protect big game winter range: (Mule Deer)
Sec. 29: E2SW;

The following lands are subject to Exhibit CO-17 to protect white pelican nesting and feeding habitat during usage:
Sec. 29: E2SW;

The following lands are subject to Exhibit CO-23 to protect bald eagle winter roost sites:
Sec. 29: E2SW;

The following lands are subject to Exhibit RG-06 to protect Least Tern and Piping Plover Nesting habitat:
Sec. 29: E2SW;

The following lands are subject to Exhibit RG-10 to protect bald eagle wintering habitat:
Sec. 29: E2SW;

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-28 to protect water impoundments/streams/wetlands
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 RG-05 to protect raptor habitat.

PARCEL ID: 6364 SERIAL #:
T. 0200S., R 0510W., 6TH PM
Sec. 12: W2SW;
Sec. 31: Lot 3,4;
Sec. 31: E2SW,SE;
Kiowa County
Colorado 400.250 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6365 SERIAL #:
T. 0200S., R 0500W., 6TH PM
Sec. 13: S2NW;
Kiowa County
Colorado 80.000 Acres
PVT/BLM; CCDO: RGRA
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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6366 SERIAL #:

T. 0200S., R 0490W., 6TH PM
Sec. 27: S2NW;
Kiowa County
Colorado 80.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6367 SERIAL #:
T. 0200S., R 0450W., 6TH PM
Sec. 35: S2SE;
Kiowa County
Colorado 80.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6368 SERIAL #:
T. 0200S., R 0440W., 6TH PM
Sec. 35: SW;
Kiowa County
Colorado 160.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6369 SERIAL #:
T. 0200S., R 0440W., 6TH PM
Sec. 7: E2; U.S. Interest 50.00%
Kiowa County
Colorado 320.000 Acres
BLM; CCDO: RGRA

All lands are subject to Exhibit CO-29 to alert lessees of paleontological area inventory requirement.
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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6370 SERIAL #:
T. 0200S., R 0420W., 6TH PM
Sec. 6: S2SE;
T. 0200S., R 0430W., 6TH PM
Sec. 1: W2SE;
Sec. 17: N2NE,E2SW;
Kiowa County
Colorado 320.000 Acres
PVT/BLM; CCDO: RGRA

All lands are subject to Exhibit CO-29 to alert lessee of paleontological area inventory requirement.
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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6371 SERIAL #:
T. 0200S., R 0420W., 6TH PM

Sec. 31: NE; U.S. Interest 25.00%
Kiowa County
Colorado 160.000 Acres
BLM; CCDO: RGRA

All lands are subject to Exhibit CO-29 to alert lessee of paleontological area inventory requirement.
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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6372 SERIAL #:
T. 0200S., R 0410W., 6TH PM
Sec. 6: Lot 7;
Sec. 7: Lot 1,7;
Sec. 8: Lot 2;
Sec. 17: Lot 1,2;
Sec. 20: Lot 1,2;
Sec. 29: Lot 1;
T. 0200S., R 0420W., 6TH PM
Sec. 23: SE;
Sec. 33: W2NW;
Sec. 34: E2NE;
Kiowa County
Colorado 687.750 Acres
PVT/BLM; CCDO: RGRA

All lands are subject to Exhibit CO-29 to alert lessee of paleontological area inventory requirement.
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-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 RG-05 to protect raptor habitat

PARCEL ID: 6373 SERIAL #:
T. 0190S., R 0540W., 6TH PM
Sec. 2: SE;
Sec. 8: Lot 10;
Sec. 23: Lot 3-6;
Sec. 31: Lot 13-18;
Sec. 32: Lot 12,13;
Kiowa County
Colorado 690.230 Acres
PVT/BLM; CCDO: RGRA

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

Sec. 2: SE;
Sec. 23: Lot 3-6;

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.
The following lands are subject to Exhibit CO-28 to protect water impoundments/streams/wetlands
Sec. 2: SE;
Sec. 31: Lot 13-18;
Sec. 32: Lot 12, 13;
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 RG-05 to protect raptor habitat.

PARCEL ID: 6374 SERIAL #:
T. 0190S., R 0530W., 6TH PM
Sec. 7: Lot 13,14,19,20;
Sec. 10: SW;
Kiowa County
Colorado 329.410 Acres
PVT/BLM; CCDO: RGRA

The following lands are subject to Exhibit CO-04 to protect bald eagle roosts and nests:
Sec. 10: SW;

The following lands are subject to Exhibit CO-09 to protect big game winter range:
Sec. 7: Lot 13,14,19,20;
Sec. 10: SW;

The following lands are subject to Exhibit CO-23 to protect bald eagle winter roost sites:
Sec. 10: SW;

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6375 SERIAL #:
T. 0190S., R 0510W., 6TH PM
Sec. 12: E2NE;
Sec. 23: E2SE;
Kiowa County
Colorado 160.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6376 SERIAL #:
T. 0190S., R 0470W., 6TH PM
Sec. 8: NW,NESW;
Sec. 23: NW;
Kiowa County
Colorado 360.000 Acres
PVT/BLM; CCDO: RGRA
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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6377 SERIAL #:
T. 0190S., R 0460W., 6TH PM
Sec. 28: SENE;
Kiowa County
Colorado 40.000 Acres
PVT/BLM; CCDO: RGRA

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-28 to protect water impoundments/streams/wetlands
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 RG-05 to protect raptor habitat.

PARCEL ID: 6378 SERIAL #:
T. 0185S., R 0540W., 6TH PM
Sec. 2: Lot 1,4,5,8;
Sec. 3: Lot 3-6;
Sec. 4: Lot 1,2,7,8;
Kiowa County
Colorado 447.760 Acres
PVT/BLM; CCDO: RGRA

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

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.
The following lands are subject to Exhibit CO-28 to protect water impoundments/streams/wetlands
Sec. 2: Lot 8;
Sec. 3: Lot 3-6;
Sec. 4, Lot 1, 2, 7;
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 RG-05 to protect raptor habitat.

PARCEL ID: 6379 SERIAL #:
T. 0180S., R 0540W., 6TH PM
Sec. 2: Lot 3;
Sec. 2: SENW;
Sec. 9: S2NW;
Sec. 22: W2NE,E2NW;
Sec. 33: SW;
Kiowa County
Colorado 480.150 Acres
PVT/BLM;BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6380 SERIAL #:
T. 0180S., R 0530W., 6TH PM
Sec. 30: SWNE,W2SE;
Kiowa County
Colorado 120.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6381 SERIAL #:
T. 0180S., R 0520W., 6TH PM
Sec. 19: Lot 1,2;
Sec. 29: SENW;
Kiowa County
Colorado 115.730 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6382 SERIAL #:
T. 0180S., R 0470W., 6TH PM
Sec. 21: SWNW;
Kiowa County
Colorado 40.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6384 SERIAL #:
T. 0180S., R 0480W., 6TH PM
Sec. 8: NE,E2NW; U.S. Interest 50.00%
Kiowa County
Colorado 240.000 Acres
BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6406 SERIAL #:
T. 0170S., R 0550W., 6TH PM
Sec. 18: TR 52;
Sec. 18: TR 53;
Lincoln County
Colorado 76.600 Acres
BLM; CCDO: RGRA
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.
The following lands are subject to Exhibit CO-28 to protect water impoundments/streams/wetlands
Sec. 18: Tract 52;
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 RG-05 to protect raptor habitat.

PARCEL ID: 6407 SERIAL #:
T. 0170S., R 0540W., 6TH PM
Sec. 35: E2SW;
Lincoln County
Colorado 80.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6408 SERIAL #:
T. 0170S., R 0540W., 6TH PM
Sec. 18: Lot 4;
Lincoln County
Colorado 42.950 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6409 SERIAL #:
T. 0170S., R 0560W., 6TH PM
Sec. 1: SWSE;
Lincoln County
Colorado 40.000 Acres
PVT/BLM; CCDO: RGRA

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-28 to protect water impoundments/streams/wetlands
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 RG-05 to protect raptor habitat.

PARCEL ID: 6410 SERIAL #:
T. 0160S., R 0560W., 6TH PM
Sec. 28: NWNE;

Lincoln County
Colorado 40.000 Acres
PVT/BLM; CCDO: RGRA
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-28 to protect water impoundments/streams/wetlands
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 RG-05 to protect raptor habitat.

PARCEL ID: 6411 SERIAL #:
T. 0160S., R 0530W., 6TH PM
Sec. 2: NESE;
Lincoln County
Colorado 40.000 Acres
PVT/BLM; CCDO: RGRA

All lands are subject to Exhibit CO-09 to protect big game winter range.
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-28 to protect water impoundments/streams/wetlands
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 RG-05 to protect raptor habitat.

PARCEL ID: 6412 SERIAL #:
T. 0160S., R 0520W., 6TH PM
Sec. 12: SESW;
Lincoln County
Colorado 40.000 Acres
PVT/BLM; CCDO: RGRA

All lands are subject to Exhibit CO-09 to protect big game winter range.
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-28 to protect water impoundments/streams/wetlands
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 RG-05 to protect raptor habitat.

PARCEL ID: 6413 SERIAL #:
T. 0130S., R 0520W., 6TH PM
Sec. 10: NWSW;
Lincoln County
Colorado 40.000 Acres
PVT/BLM; CCDO: RGRA

All lands are subject to Exhibit CO-09 to protect big game winter range.
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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6419 SERIAL #:
T. 0160S., R 0550W., 6TH PM
Sec. 10: W2NE;
Lincoln County
Colorado 80.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6387 SERIAL #:
T. 0210S., R 0540W., 6TH PM
Sec. 34: E2NE;
Otero County
Colorado 80.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6388 SERIAL #:
T. 0230S., R 0560W., 6TH PM
Sec. 15: LOT 1 EXCL PATENT 1556;
Otero County
Colorado 18.250 Acres
BLM; CCDO: RGRA

All lands are subject to Exhibit CO-07 to protect waterfowl and shorebird habitat and rookeries within significant production areas
All lands are subject to Exhibit RG-09 to protect wild turkey habitat.
All lands are subject to Exhibit RG-10 to protect bald eagle wintering habitat.
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-28 to protect water impoundments/streams/wetlands
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 RG-05 to protect raptor habitat.

PARCEL ID: 6389 SERIAL #:
T. 0230S., R 0540W., 6TH PM
Sec. 35: E2SE;
Otero County
Colorado 80.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PVT/BLM; CCDO: RGRA

PARCEL ID: 6390 SERIAL #:
T. 0240S., R 0560W., 6TH PM
Sec. 20: W2NE;
Otero County
Colorado 80.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6391 SERIAL #:
T. 0240S., R 0550W., 6TH PM
Sec. 21: NESW;
Otero County
Colorado 40.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6392 SERIAL #:
T. 0250S., R 0550W., 6TH PM
Sec. 9: SESE;
Otero County
Colorado 40.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6393 SERIAL #:
T. 0250S., R 0540W., 6TH PM
Sec. 34: N2S2;
Otero County
Colorado 160.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6514 SERIAL #:
T. 0240S., R 0540W., 6TH PM
Sec. 1: S2NW;
Sec. 9: SWNE;

Otero County
Colorado 120.000 Acres
PVT/BLM; CCDO: RGRA

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-28 to protect water impoundments/streams/wetlands
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 RG-05 to protect raptor habitat.

PARCEL ID: 6329 SERIAL #:
T. 0210S., R 0440W., 6TH PM
Sec. 14: W2NW;

Sec. 29: S2SE;
Sec. 33: E2;
Prowers County
Colorado 480.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6330 SERIAL #:
T. 0210S., R 0450W., 6TH PM
Sec. 12: E2;
Prowers County
Colorado 320.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6332 SERIAL #:
T. 0220S., R 0430W., 6TH PM
Sec. 25: W2NE,SENW,NESW; U.S. Interest 50.00%
Sec. 25: THOSE PORTIONS LYING ;
Sec. 25: EASTERLY OF R/W A.T. & S.F.R.R.;
Prowers County
Colorado 112.800 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6333 SERIAL #:
T. 0220S., R 0430W., 6TH PM
Sec. 31: SESE;
Prowers County
Colorado 40.000 Acres
PVT/BLM; CCDO: RGRA

All lands are subject to Exhibit CO-07 to protect waterfowl and shorebird habitat and rookeries within significant production areas.
All lands are subject to Exhibit RG-10 to protect bald eagle wintering habitat.
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-28 to protect water impoundments/streams/wetlands
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 RG-05 to protect raptor habitat.

PARCEL ID: 6334 SERIAL #:
T. 0220S., R 0440W., 6TH PM
Sec. 5: NESW,W2SE;
Sec. 8: NWNW;
Prowers County
Colorado 160.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6350 SERIAL #:
T. 0220S., R 0470W., 6TH PM
Sec. 26: Lot 5-8;
Prowers County
Colorado 67.720 Acres
PVT/BLM; CCDO: RGRA

All lands are subject to Exhibit RG-10 to protect bald eagle wintering habitat.
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-28 to protect water impoundments/streams/wetlands
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 RG-05 to protect raptor habitat.

PARCEL ID: 6353 SERIAL #:
T. 0230S., R 0430W., 6TH PM

Sec. 4: NWSW;
Sec. 5: Lot 4;
Sec. 5: SWNE;
Sec. 10: NESW,SWSE;
Prowers County
Colorado 200.260 Acres
PVT/BLM; CCDO: RGRA

The following lands are subject to Exhibit CO-07 to protect waterfowl and shorebird habitat and rookeries within significant production areas:
Sec. 4: NWSW;
Sec. 5: SWNE;
Sec. 10: NESW,SWSE;

The following lands are subject to Exhibit RG-10 to protect bald eagle wintering habitat:
Sec. 4: NWSW;
Sec. 5: lot 4;
Sec. 10: NESW,SWSE;

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-28 to protect water impoundments/streams/wetlands
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 RG-05 to protect raptor habitat.

PARCEL ID: 6356 SERIAL #:
T. 0230S., R 0450W., 6TH PM
Sec. 31: Lot 1,2;
Sec. 31: E2NW;
Prowers County
Colorado 155.600 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6357 SERIAL #:
T. 0230S., R 0460W., 6TH PM
Sec. 8: SE;
Sec. 9: SW;
Prowers County
Colorado 320.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6361 SERIAL #:
T. 0240S., R 0460W., 6TH PM
Sec. 15: W2;
Sec. 20: N2NW;
Prowers County
Colorado 400.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6362 SERIAL #:
T. 0240S., R 0470W., 6TH PM
Sec. 22: NWNE;
Sec. 27: SE;
Sec. 34: NE;
Prowers County
Colorado 360.000 Acres
PVT/BLM; CCDO: RGRA

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-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 RG-05 to protect raptor habitat.

PARCEL ID: 6396 SERIAL #:
T. 0100N., R 0560W., 6TH PM
Sec. 15: SWNW,S2SW;
Weld County
Colorado 120.000 Acres
PVT/BLM; CCDO: RGRA

All lands are subject to Exhibit CO-29 to alert lessee of paleontological area inventory requirement.
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-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 RG-05 to protect raptor habitat.

Attachment D - Stipulation Exhibits

EXHIBIT CO-02

Lease Number:

NO SURFACE OCCUPANCY STIPULATION

No surface occupancy or use is allowed on the lands described below (legal description or other description):

For the purpose of:

To protect lesser prairie chicken dancing grounds within a 0.6 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 of the site or on the geographical relationship to topographic barriers and vegetation screening.

EXHIBIT CO-03

Lease Number:

NO SURFACE OCCUPANCY STIPULATION

No surface occupancy or use is allowed on the lands described below (legal description or other description):

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:

NO SURFACE OCCUPANCY STIPULATION

No surface occupancy or use is allowed on the lands described below (legal description or other description):

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 the current usage of the site, or the geographical relationship to the topographic barriers and vegetation screening.
Lease Number:

EXHIBIT CO-07

Lease Number:

NO SURFACE OCCUPANCY STIPULATION

No surface occupancy or use is allowed on the lands described below (legal description or other description):

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:

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

For the purpose of (reasons):

To protect big game (mule deer, elk, pronghorn antelope, and bighorn sheep) winter range, including crucial winter habitat and other definable winter range as mapped by the Colorado Division of Wildlife. This may apply to sundry notice that require an environmental analysis.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of the stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

Exception Criteria:
An exception may be granted under mild winter conditions for the last 60 days of the closure.

EXHIBIT CO-17

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

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 the stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

EXHIBIT CO-18

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

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:

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:

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-26

Lease Number:

CONTROLLED SURFACE USE STIPULATION

Surface occupancy or use is subject to the following special operating constraints.

For the purpose of:

Protecting fragile soils. Prior to surface disturbance of fragile soils, it must be demonstrated to the Authorized Officer through a plan of development that the following performance objectives will be met.

Performance Objectives:

I. Maintain the soil productivity of the site.

II. Protect off-site areas by preventing accelerated soil erosion (such as land-sliding, gullying, drilling, piping, etc.) from occurring.

III. Protect water quality and quantity of adjacent surface and groundwater sources.

IV. Select the best possible site for development in order to prevent impacts to the soil and water resources.

Fragile soil areas, in which the performance objective will be enforced, are defined as follows:

a. Areas rated as highly or severely erodible by wind or water, as described by the Soil Conservation Service in the Area Soil Survey Report or as described by on-site inspection.

b. Areas with slopes greater than or equal to 35 percent, if they also have one of the following soil characteristics:

(1) a surface texture that is sand, loamy sand, very fine sandy loam, fine sandy loam, silty clay or clay;
(2) a depth to bedrock that is less than 20 inches;
(3) an erosion condition that is rated as poor; or (4) a K factor of greater than 0.32.

Performance Standards:

I. All sediments generated from the surface-disturbing activity will be retained on site.

II. Vehicle use would be limited to existing roads and trails.

III. All new permanent roads would be built to meet primary road standards (BLM standards) and their location approved by the Authorized Officer. For oil and gas purposes, permanent roads are those used for production.

IV. All geophysical and geochemical exploration would be conducted by helicopter, horseback, on foot, or from existing roads.

V. Any sediment control structures, reserve pits, or disposal pits would be designed to contain a 100-year, 6-hour storm event. Storage volumes within these structures would have a design life of 25 years.

VI. Before reserve pits and production pits would be reclaimed, all residue would be removed and trucked off-site to an approved disposal site.

VII. Reclamation of disturbed surfaces would be initiated before November 1 each year.

VIII. All reclamation plans would be approved by the Authorized Officer in advance and might require an increase in the bond.

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:

CONTROLLED SURFACE USE STIPULATION

Surface occupancy or use is subject to the following special operating constraints.

On the lands described below:

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 NOTICE

The lessee is hereby notified that prior to any surface disturbing activities, an inventory of paleontological resources (fossils) may be required. Mitigation may be required upon the discovery of any vertebrate fossil or other scientifically-important paleontological resource. Mitigation of scientifically important paleontological resources may include avoidance, monitoring, collection, excavation, or sampling. Mitigation of discovered scientifically important paleontological resources might require the relocation of the disturbance over 100 meters. This and any subsequent mitigation work shall be conducted by a BLM-permitted paleontologist.

The lessee shall bear all costs for inventory and mitigation (WO IM-2009-011).
On the lands described below:

EXHIBIT CO-30

Lease Number:

LEASE NOTICE

In order to protect the following nesting grouse species: greater sage grouse, Gunnison sage grouse, Columbian sharp-tailed grouse, plains sharp-tailed grouse, greater prairie chicken and/or lesser prairie chicken, surface-disturbing activities proposed during the period between March 1 and July 7 will be relocated, consistent with lease rights granted and section 6 of standard lease terms, out of grouse habitat.
On the lands described below:

EXHIBIT CO-34

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. The 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. The 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. The 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.

EXHIBIT CO-39

Lease Number:

CONTROLLED SURFACE USE STIPULATION

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.)

EXHIBIT RG-03

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 1 through July 31

For the purpose of (reasons):

To protect lesser prairie chicken habitat.

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 RG-05

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 15 through July 31

On the lands described below:

For the purpose of (reasons):

To protect raptor habitat.

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 RG-06

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 1 through July 31

On the lands described below:

For the purpose of (reasons):

Least Tern and Piping Plover Nesting habitat

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 RG-09

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 1 through July 31

On the lands described below:

For the purpose of (reasons):

To protect wild turkey habitat.

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 RG-10

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 March 31

On the lands described below:

For the purpose of (reasons):

To protect bald eagle wintering habitat.

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.)

Attachment E – Maps of Parcels

February 2013 - Colorado Competitive Oil & Gas Lease Sale

[See Separate file]

Attachment F
February 2013 Oil & Gas Lease EA

Summary of Substantial Public Comments Topics

A summary of topics raised by public comments are addressed below or in each of the relevant resource sections of the EA and if warranted considered in modifying the proposed action. Some issues raised by the public are related to development stage oil and gas activity while others are commonly addressed during the lease stage. Copies of public comments received are available for viewing at the Royal Gorge Field Office. A summary of public comment topics to the draft EA is as follows:

COMMENTS TOPIC SUMMARY	BLM RESPONSE
Water Quality Surface and ground water quality concerns relating to drinking water supplies, trout populations, naturally occurring radioactivity and the wetland/aquatic system for lease parcels in Park County adjacent existing sources including wells, Spinney Reservoir and its tributaries.	All February 2013 lease parcels within Park County have been deferred for further analysis because of inter-related and overlapping resource concerns identified by internal analysis and public comment, precluding the need to further consider this specific concern at this time.
Visual Resources Concerns that potential impacts to visual resources in Park County will degrade the visual character of South Park and impair the quality of its recreation and tourism experiences.	All February 2013 lease parcels within Park County have been deferred for further analysis because of inter-related and overlapping resource concerns identified by internal analysis and public comment, precluding the need to further consider this specific concern at this time.
Wildlife A variety of wildlife concerns were raised for parcels in Park County, including potential impacts to Threatened and Endangered species, pronghorn, elk, deer, mountain plover, Gunnison's Prairie Dog, burrowing owls, critical habitat and the adequacy of	All February 2013 lease parcels within Park County have been deferred for further analysis because of inter-related and overlapping resource concerns identified by internal analysis and public comment, precluding the need to further consider

proposed measures to mitigate those impacts.	this specific concern at this time.
Socio-Economic Concerns for potential reductions to Park County property values, local tax base and Colorado State revenues generated from recreation and tourism.	All February 2013 lease parcels within Park County have been deferred for further analysis because of inter-related and overlapping resource concerns identified by internal analysis and public comment, precluding the need to further consider this specific concern at this time.
Traffic Concern for increases in truck traffic associated with oil and gas activities on rural highways and residential neighborhoods in Park County.	All February 2013 lease parcels within Park County have been deferred for further analysis because of inter-related and overlapping resource concerns identified by internal analysis and public comment, precluding the need to further consider this specific concern at this time.
Defer for further analysis in future RMP Suggestions that the Park County lease parcels should be deferred because the Royal Gorge RMP is not adequate or up to date to effectively analyze the impacts and necessary mitigation for oil and gas activities.	In general, the RMP currently includes sufficient criteria for protection of resources on public lands within the Royal Gorge Field Office. However, the parcels within Park County have been deferred for further analysis because of inter-related and overlapping resource concerns identified by internal analysis and public comment, precluding the need to further consider this specific concern at this time.
Fracking Concerns over the potential impacts from the use of fracking techniques for lease parcels in Park County.	All February 2013 lease parcels within Park County have been deferred for further analysis because of inter-related and overlapping resource concerns identified by internal analysis and public comment, precluding the need to further consider this specific concern at this time.
Recreation Concerns over the importance of recreation and tourism in the South Park area to both Park County and the State of Colorado and their incompatibility with oil and gas activities.	All February 2013 lease parcels within Park County have been deferred for further analysis because of inter-related and overlapping resource concerns identified by internal analysis and public

	comment, precluding the need to further consider this specific concern at this time.
<u>Noise</u> Concerns related to the potential impacts to residents, recreationists, and wildlife from increased noise generated by the drilling operations.	All February 2013 lease parcels within Park County have been deferred for further analysis because of inter-related and overlapping resource concerns identified by internal analysis and public comment, precluding the need to further consider this specific concern at this time.
<u>Cultural Resources</u> Concerns for the potential impacts to historic and cultural resources of the Park County.	All February 2013 lease parcels within Park County have been deferred for further analysis because of inter-related and overlapping resource concerns identified by internal analysis and public comment, precluding the need to further consider this specific concern at this time.
<u>Master Leasing Plan</u> Requests for the preparation of a Master Leasing Plan in Park County prior to any parcels in South Park being leased.	There are four criteria for preparing an MLP. These criteria are outlined in the BLM Washington Office Instructional Memorandum No. 2010-117 and BLM Colorado State Instructional Memorandum No. Co-2010-027, and include: 1. A substantial portion of the area to be analyzed in the MLP is not currently leased. 2. There is a majority of Federal mineral interest. 3. The oil and gas industry has expressed a specific interest in leasing, and there is moderate or high potential for oil and gas confirmed by the discovery of oil and gas in the general area. 4. Additional analysis or information to address likely resource or cumulative impacts if oil and gas development were to occur …. BLM review of previous requests for an MLP for the South Park area does not meet the criteria of an MLP for two reasons: • Criterion 1: The majority of the federal

	minerals with high or medium potential have already been leased • Criterion 3: "…Areas where there is moderate or high potential for oil and gas *as confirmed by the discovery of oil and gas*." (Emphasis added): The discovery of oil and gas in the South Park basin in producing quantities has not been confirmed. There have been 25 wells drilled within the area since the 1930s. All of the wells have been abandoned and there are no producing oil and gas wells in the South Park Basin. Oil and gas development in South Park is still in the exploratory stage and highly speculative. In addition, all parcels within Park County have been deferred for further analysis because of inter-related and overlapping resource concerns identified by internal analysis and public comment, precluding the need to further consider this specific concern at this time.
<u>Redhill Forest Subdivision</u> Concerns were raised with the compatibility of oil and gas activities with the existing unincorporated subdivisions of South Park.	All February 2013 lease parcels within Park County have been deferred for further analysis because of inter-related and overlapping resource concerns identified by internal analysis and public comment, precluding the need to further consider this specific concern at this time.
<u>Park County Land Use Requirements</u> Suggestions that lease parcels in Park County will require rezoning, 1041 permitting or approval of a Special Use Permit prior to drilling activities.	All February 2013 lease parcels within Park County have been deferred for further analysis because of inter-related and overlapping resource concerns identified by internal analysis and public comment, precluding the need to further consider this specific concern at this time.
<u>BLM's Instructional Memorandum (IM) 2010-117</u> Suggestions that the BLM has not appropriately	In general, IM 2010-117 addresses general reform of BLM oil and gas leasing process. It updated

implemented the provisions of BLM's Instructional Memorandum (IM) 2010-117 on oil and gas leasing reform.	several aspects of the leasing process, including interdisciplinary review of lease sale parcels, site visits, public participation, NEPA compliance documentation. For the February 2013 oil and gas lease sale RGFO used an interdisciplinary review of the lease sale parcels, conducted numerous site visits, and prepared an EA that has been available and reviewed by the public. RGFO has complied with all aspects of IM 2010-117.
Lesser Prairie Chicken Production Areas According to CPW some parcels are believed to contain lesser prairie-chicken production areas.	A suite of stipulations have been attached to parcels to protect lesser prairie chickens and their habitat (Please see 3.3.2 Threatened, Endangered and Sensitive Species).
Lesser Prairie Chicken Leks Buffer CPW believes that the BLM's proposed .25 mile buffer around Prairie-Chicken leks is inadequate to protect these production areas and recommends a 0.6 mile buffer.	The RGFO adopted the 0.6 mile buffer around prairie chicken leks in 2008. A RMP plan maintenance action was executed adjusting the NSO buffer from 0.25 miles to 0.6 miles. This change has been expressed in the application of stipulations that pertain to lesser prairie chickens.
CNHP High Priority Potential Conservation Areas All or portions of several parcels are located within CNHP High Priority Potential Conservation Areas (PCA). BLM should avoid leasing in PCA's. All leasing in PCA's should have NSO stipulations attached.	We are aware of these designations by CNHP and consider them during this process. We also have rare species habitat information from the Colorado Parks and Wildlife and the CNHP database and take this information into consideration during this process. In the past, BLM has worked effectively with industry to address concerns about drilling in sensitive areas and during critical time periods and we believe this will continue in the future. In addition, BLM can require that drilling operations be moved up to 600' (200 m) and that activities are delayed or postponed by 60 days. BLM will use these mitigation tools as appropriate.