United States Department of the Interior Bureau of Land Management

Determination of NEPA Adequacy DOI-BLM-CO-S010-2017-0001-DNA

May 2016

Tres Rios November 2016 Oil and Gas Lease Sale

Location: Five parcels comprising 4,912.33 acres in Dolores County, Colorado

Tres Rios Field Office 29211 Highway 184 Dolores, CO 81323 Phone: (970) 882-7296 FAX: (970) 882-6841

Worksheet

Determination of NEPA Adequacy

U.S. Department of the Interior Colorado Bureau of Land Management

OFFICE: Tres Rios Field Office

TRACKING NUMBER: DOI-BLM-CO-S010-2017-0001-DNA

CASEFILE/PROJECT NUMBER: Parcels 6715, 7371, 7372, 7373, and 7390

PROPOSED ACTION TITLE/TYPE: November 2016 Competitive Oil and Gas Lease Sale

LOCATION/LEGAL DESCRIPTION: See Attachments B and C for full legal descriptions

A. Description of Proposed Action

The Bureau of Land Management (BLM) proposes to offer five parcels, totaling approximately 4,912.33 acres of federal mineral estate within the Tres Rios Field Office, for lease in the upcoming November 2016 Competitive Oil and Gas Lease Sale.

The BLM, State of Colorado, and owners of the private lands have reviewed the nominated lease parcels to ensure that the lands have been adequately analyzed for potential impacts and addressed in prior National Environmental Policy Act (NEPA) analysis. The proposed sale parcels are located in Dolores County, Colorado.

The BLM adopted leasing decisions from the *Tres Rios Field Office Record of Decision and Approved Resource Management Plan (2015) (TRFO ROD/RMP)*. The TRFO ROD/RMP meets the requirements and regulations for implementing the Federal Land Policy and Management Act of 1976 (Title 43 CFR, part 1600).

In accordance with the TRFO ROD/RMP, all parcels have several stipulations, including No Surface Occupancy (NSO), Timing Limitation (TL), and Controlled Surface Use (CSU) stipulations, and Lease Notices. A map depicting the five proposed parcels is contained in Attachment A, and legal descriptions of the parcels are in Attachment B. Legal descriptions and stipulations for the five parcels recommended for lease are in Attachment C, and full descriptions of the stipulations applied to each parcel are in Attachment D.

If the parcels are not leased at the upcoming November 2016 sale they would remain available to be leased for a period of up to two years to any qualified lessee. 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 competitive lease sale process again prior to being leased.

The act of leasing does not authorize any development or use of the surface of lease lands without further application and approval by the BLM. After a parcel is leased, the BLM may receive an Application for Permit to Drill (APD). If and when APDs are received, additional site-specific NEPA analysis would be completed.

B. Land Use Plan (LUP) Conformance

Plan: Tres Rios Field Office Record of Decision and Approved Resource Management Plan (*TRFO ROD/RMP*) *Date Approved:* February 2015

The proposed action is in conformance with the applicable LUP because it is specifically provided for in the following RMP decisions:

Decision Language: This program emphasizes the orderly and environmentally responsible development of oil and gas (natural gas and CO2) deposits (page II-111).

The TRFO ROD/RMP identifies areas open for oil and gas leasing (pages II-113 through II-121), and specifies stipulations that would apply to leases (Appendix H). The proposed lease parcels are within the areas identified as open to leasing. Based on the TRFO ROD/RMP, specific stipulations have been attached to each of the proposed lease parcels.

C. Identify the applicable National Environmental Policy Act (NEPA) documents and other related documents that cover the proposed action.

The BLM Tres Rios Field Office Record of Decision and Approved Resource Management Plan (TRFO ROD/RMP) (February 2015), San Juan National Forest Land and Resource Management Plan Final Environmental Impact Statement (RMP FEIS) (September 2013).

D. NEPA Adequacy Criteria

1. Is the new proposed action a feature of, or essentially similar to, an alternative analyzed in the existing NEPA document(s)? Is the project within the same analysis area, or if the project location is different, are the geographic and resource conditions sufficiently similar to those analyzed in the existing NEPA document(s)? If there are differences, can you explain why they are not substantial?

Yes. The proposed action is included in an alternative analyzed in the Tres Rios Resource Management Plan and Final Environmental Impact Statement (RMP/FEIS). The proposed lease parcels are within the area analyzed by the RMP/FEIS, and leasing and subsequent development of oil and gas resources on the parcels was specifically analyzed throughout the RMP/FEIS (see chapters 3 and 4). Section 3.19 of the RMP/FEIS describes the acres of currently leased and unleased federal minerals, under BLM, U.S. Forest Service, and split-estate surface ownership.

The RMP/FEIS analyzes oil and gas leasing and describes the types of stipulations which should be applied for resource protection and mitigation, and explains that stipulations, conditions of approval, and other existing laws can mitigate resource concerns during development. The RMP/FEIS also describes average acres of disturbance for development of well pads, roads, pipelines, and other facilities. Other resource sections within the RMP/FEIS describe the type and qualitative impacts of development on the various resources addressed in the RMP/FEIS. All lands considered in this action are open to leasing under the RMP/FEIS, and stipulations have been attached in conformance with the RMP/FEIS.

2. Is the range of alternatives analyzed in the existing NEPA document(s) appropriate with respect to the new proposed action (or existing proposed action), given current environmental concerns, interests, and resource values?

Yes. Five alternatives, covering a full range of oil and gas leasing options, were addressed in the RMP/FEIS (see Section 2.4.6 of that document). The alternatives ranged from the most restrictive, a No Leasing Alternative, to the least restrictive, which made 78% of lands Available for Lease and had No Surface Occupancy (NSO) stipulations on only 38% of those lands. Alternative B, with modifications, was the selected alternative which makes 88% of the BLM mineral estate Available for Lease and NSO stipulations apply to 44% of those lands. Other alternatives were considered but eliminated from full analysis in the RMP/FEIS due to being contrary to law or valid existing rights, or similar to analyzed alternatives. These alternatives considered to be adequate and valid for the proposed action.

3. Is existing analysis adequate in light of any new information or circumstances (such as, rangeland health standards assessment; recent endangered species listings, updated list of BLM sensitive species)? Can you reasonably conclude that new information and new circumstances would not substantially change the analysis of the new proposed action?

Yes, the existing TRFO RMP/FEIS is valid. We are not aware of any new information or circumstances that would require modification of the analysis.

4. Are the direct, indirect, and cumulative effects that would result from implementation of the new proposed action similar (both quantitatively and qualitatively) to those analyzed in the existing NEPA document?

Yes. The impacts of oil and gas developments, as well as other resource management actions, were addressed in the RMP/FEIS based on a reasonable foreseeable development (RFD) scenario of approximately 2900 new wells in the next 15 years. Since the TRFO ROD/RMP was signed in February 2015, only four new wells have been approved. This totals about one new well every three-and-a-half months, which is only 2% of the RFD's predicted monthly average. Thus, the impacts, to date, from oil and gas development are much lower than those anticipated under the approved plan, and are within the range of alternatives analyzed in the RMP/FEIS.

5. Are the public involvement and interagency review associated with existing NEPA document(s) adequate for the current proposed action?

Yes. Full public review occurred during the RMP/FEIS process. The current proposed lease sale would fall under the RMP/FEIS. In addition, a public scoping period for these parcels was held from May 11 - June 10, 2015, and a courtesy notice for that public scoping period was posted on the BLM web site. Additionally, surface owners of the proposed parcels were notified of the proposed leasing action by mail.

An initial draft of this DNA will be posted from May 12 - June 13, 2016 for public review and comment. Again, surface owners of the proposed parcels will be notified of the proposed leasing action and initiation of the public comment period by mail and/or e-mail on May 12, 2016.

In addition, a notice of the competitive lease sale is being posted approximately ninety (90) days prior to the sale on the BLM web site,

http://www.blm.gov/co/st/en/BLM Programs/oilandgas/oil and gas lease.html .

| Name | Title | Resource Represented |
|------------------|---|---|
| Robert Garrigues | Natural Resource Specialist | Project Manager |
| Justin Abernathy | Assistant Field Manager | NEPA |
| Chad Meister | Natural Resource Specialist | Air |
| Bruce Bourcy | Archaeologist | Cultural Resources |
| Marietta Eaton | Manager, Canyons of the Ancients National Monument | Native American Religious Concerns |
| Brad Pietruszka | Fire Management Specialist | Fuels, Fire |
| Nathaniel West | Wildlife Biologist | Wildlife; Migratory Birds; Special Status Animal Species; Threatened, Endangered or Candidate Animal Species; Wetlands; Water Resources |
| Mike Jensen | Botanist | Invasive Species/Noxious Weeds; Rangeland; Special Status Plant Species; Threatened, Endangered or Candidate Plant Species; Vegetation |
| Martin Hensley | Economist | Environmental Justice; Socio- Economics |
| Harrison Griffin | Realty Specialist | Lands/Access |
| Jeff Christenson | Outdoor Recreation Planner | Lands with Wilderness Characteristics; Recreation; Visual; Wild and Scenic Rivers; Wilderness/Wilderness Study Areas |
| John Pecor | Petroleum Engineer | Mineral Resources; Waste |
| Jamie Blair | Paleontology Coordinator | Paleontology |

E. Persons/Agencies/BLM Staff Consulted:

In addition, the list of preparers, cooperating agencies, and tribes participating in the original RMP/FEIS is available in the FEIS, Chapter 4.

Remarks:

CULTURAL RESOURCES (National Historic Preservation Act of 1966 (NHPA), P.L. 89-665 as amended by P.L. 94-422, P.L. 94-458, and P.L. 96-515):

The leasing of federal mineral rights for potential oil and gas exploration and production is an undertaking under section 106 of the NHPA, 16 U.S.C. § 470f. The TRFO RMP FEIS process was conducted in accordance with the requirements of the NHPA and compliance with section 106 of the NHPA for the subject lease sale is currently in progress.

Tribal consultation specifically for the proposed leasing action addressed here was initiated on November 6, 2015. The Tribes have been asked to provide any information that they are aware of regarding cultural resource values, including historic properties that are listed on or eligible for listing on the National Register of Historic Places (NRHP), traditional cultural properties and other sacred sites, that may be impacted by the proposed lease parcels. Tribal consultation for the subject lease sale is currently still in progress.

There will be no direct impacts to cultural resource values, including historic properties, solely as a result of leasing the subject parcels. However, the act of leasing the parcels may have indirect impacts to cultural resource values. Leasing allows for the future development of oil and gas resources from the parcels, subject to the lease terms, the stipulations attached to the leases and the applicable laws and regulations. Oil and gas exploration and development has the potential to impact the setting for cultural resource sites and it may provide for more public access (authorized or unauthorized) in the areas where development occurs. The density of any future oil and gas development and the potential for increased public access could contribute to direct, indirect, or cumulative effects on historic properties, which might include illegal artifact collection and vandalism.

Any oil and gas exploration and/or development proposed in the future for the leases would be subject to additional site-specific cultural resources reviews and analysis in accordance with section 106 of the NHPA, including cultural resources inventories, effects assessments, Tribal consultation, and if necessary, actions to resolve potentially adverse effects. This requirement is outlined in controlled surface use (CSU) stipulation CO-39, which is attached to each of the proposed lease parcels.

CONCLUSION

Plan Conformance:

- X This proposal conforms to the applicable land use plan.
- □ This proposal does not conform to the applicable land use plan

Determination of NEPA Adequacy

X Based on the review documented above, I conclude that this proposal conforms to the applicable land use plan and that the NEPA documentation fully covers the proposed action and constitutes BLM's compliance with the requirements of the NEPA.

□ The existing NEPA documentation does not fully cover the proposed action. Additional NEPA documentation is needed if the project is to be further considered.

| Signature of Project Lead | Date |
|---------------------------------------|------|
| Signature of NEPA Coordinator | Date |
| Signature of the Responsible Official | Date |

Note: The signed <u>Conclusion</u> on this Worksheet is part of an interim step in the BLM's internal decision process and does not constitute an appealable decision. However, the lease, permit, or other authorization based on this DNA is subject to protest or appeal under 43 CFR Part 4 and the program-specific regulations.

ATTACHMENTS:

Attachment A: Map Attachment B: Legal Descriptions of Proposed Parcels Attachment C: Parcels Recommended for Lease with Applied Stipulations Attachment D: Stipulation Descriptions Attachment E: Responses to Public Comments ATTACHMENT A: Map



Attachment B: Legal Descriptions of Proposed Parcels

Attachment B: Legal Descriptions of Proposed Parcels

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

PARCEL ID: 6715

<u>T.0400N., R.0130W., NMPM</u> Section 19: Lot 1,2; Section 19: E2W2;

Dolores County Colorado 196.440 Acres

PVT/BLM; COS:TRFO

PARCEL ID: 7371

T.0400N., R.0150W., NMPM Section 27: E2E2,E2W2,SWNW,W2SW; Section 34: ALL;

Dolores County Colorado 1080.000 Acres

PVT/BLM; COS:TRFO

PARCEL ID: 7372

T.0410N., R.0130W., NMPM Section 3: Lot 1-4; Section 3: S2N2,S2; Section 4: Lot 1-4; Section 4: S2NE,NWSW,NESE,S2S2; Section 5: Lot 1; Section 5: SENE,S2;

Dolores County Colorado 1519.900 Acres

PVT/BLM; COS:TRFO

PARCEL ID: 7373

T.0410N., R.0130W., NMPM

Section 6: Lot 2-7; Section 6: SWNE,SENW; Section 6: NESW,N2SE,SESE;

Dolores County Colorado 503.640 Acres

PVT/BLM; COS:TRFO

PARCEL ID: 7390

T.0420N., R.0130W., NMPM Section 31: Lot 3,4; Section 31: N2NE,SENE,NENW; Section 31: E2SW,SWSE; Section 32: N2,N2SW,SESW,SE; Section 33: ALL;

Dolores County Colorado 1612.350 Acres

PVT/BLM; COS:TRFO

ATTACHMENT C: Parcels Recommended for Lease with Applied Stipulations

ATTACHMENT C: Parcels Recommended for Lease with Applied Stipulations

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

Stipulations are No Surface Occupancy (NSO), Timing Limitation (TL), Controlled Surface Use (CSU), or Lease Notice.

PARCEL ID: 6715

<u>T.0400N., R.0130W., NMPM</u> Section 19: Lot 1,2; Section 19: E2W2;

Dolores County Colorado 196.440 Acres

All lands are subject to Exhibit 1.4.1 (NSO) to protect ephemeral streams.

All lands are subject to Exhibit 1.4.2 (CSU) to protect ephemeral streams.

All lands are subject to Exhibit 1.6.1 (CSU) to protect shallow groundwater resources.

All lands are subject to Exhibit 1.6.2 (CSU) to protect groundwater resources during hydraulic fracturing.

All lands are subject to Exhibit 1.8.1 (Lease Notice) to protect against radioactive materials.

All lands are subject to Exhibit 1.10.1 (CSU) to protect 25-35% slopes and shale soils.

All lands are subject to Exhibit 1.11.1 (NSO) to protect lands prone to mass movement.

All lands are subject to Exhibit 1.13.1 (CSU) to protect biological soil crusts.

All lands are subject to Exhibit 2.1.1 (NSO) to protect threatened, endangered, proposed and candidate plants.

All lands are subject to Exhibit 2.2.1 (CSU) to protect sensitive plants.

All lands are subject to Exhibit 3.2.1 (CSU) to protect lynx habitat.

All lands are subject to Exhibit 3.8.1 (Lease Notice) to protect migratory birds.

All lands are subject to Exhibit 3.9.1 (NSO) to protect raptors.

All lands are subject to Exhibit 3.9.2 (TL) to protect raptors.

All lands are subject to Exhibit 3.10.1 (TL) to protect big game parturition areas.

All lands are subject to Exhibit 3.10.2 (CSU) to protect big game winter range and production areas.

All lands are subject to Exhibit CO-29 to alert lessee of PFYC 4 and 5 paleontological area inventory requirement.

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

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

All lands are subject to Exhibit CO-56 (Lease Notice) to alert lessees of potential supplementary air analysis.

PVT/BLM; COS:TRFO

PARCEL ID: 7371

<u>T.0400N., R.0150W., NMPM</u> Section 27: E2E2,E2W2,SWNW,W2SW; Section 34: ALL;

Dolores County Colorado 1080.000 Acres

All lands are subject to Exhibit 1.4.1 (NSO) to protect ephemeral streams.

All lands are subject to Exhibit 1.4.2 (CSU) to protect ephemeral streams.

All lands are subject to Exhibit 1.6.1 (CSU) to protect shallow groundwater resources.

All lands are subject to Exhibit 1.6.2 (CSU) to protect groundwater resources during hydraulic fracturing.

All lands are subject to Exhibit 1.8.1 (Lease Notice) to protect against radioactive materials.

All lands are subject to Exhibit 1.10.1 (CSU) to protect 25-35% slopes and shale soils.

All lands are subject to Exhibit 1.13.1 (CSU) to protect biological soil crusts.

All lands are subject to Exhibit 2.1.1 (NSO) to protect threatened, endangered, proposed and candidate plants.

All lands are subject to Exhibit 2.2.1 (CSU) to protect sensitive plants.

All lands are subject to Exhibit 3.8.1 (Lease Notice) to protect migratory birds.

All lands are subject to Exhibit 3.9.1 (NSO) to protect raptors.

All lands are subject to Exhibit 3.9.2 (TL) to protect raptors.

All lands are subject to Exhibit CO-29 to alert lessee of PFYC 4 and 5 paleontological area inventory requirement.

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

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

All lands are subject to Exhibit CO-56 (Lease Notice) to alert lessees of potential supplementary air analysis.

The following lands are subject to Exhibit 1.3.1 (NSO) to protect perennial water bodies: T.0400N., R.0150W., NMPM

Section 27: E2E2, E2NW, SWNW, E2SW, SWSW; Section 34: NE, N2SE, SESE, SW, E2NW;

The following lands are subject to Exhibit 1.3.2 (CSU) to protect perennial water bodies: <u>T.0400N., R.0150W., NMPM</u>

Section 27: E2E2, E2NW, SWNW, E2SW, SWSW; Section 34: SW, SESE;

The following lands are subject to Exhibit 1.9.1 (NSO) to protect greater than 35% slopes: T.0400N., R.0150W., NMPM

Section 27: SWNW, SW; Section 34: SWNE, NW, N2SW, NWSE; The following lands are subject to Exhibit 1.11.1 (NSO) to protect lands prone to mass movement:

T.0400N., R.0150W., NMPM

Section 27: E2E2, NENW, SWNW, W2SW, SESW; Section 34: ALL;

The following lands are subject to Exhibit 3.11.1 (CSU) to protect Gunnison prairie dog: Section 34: S2SW;

The following lands are subject to Exhibit 4.9.1 (NSO) to protect visual resources: Section 27: E2NE, NESE; Section 34: SWNE, NWSE;

PVT/BLM; COS:TRFO

PARCEL ID: 7372

T.0410N., R.0130W., NMPM Section 3: Lot 1-4; Section 3: S2N2,S2; Section 4: Lot 1-4; Section 4: S2NE,NWSW,NESE,S2S2; Section 5: Lot 1; Section 5: SENE,S2;

Dolores County Colorado 1519.900 Acres

All lands are subject to Exhibit 1.4.1 (NSO) to protect ephemeral streams.

All lands are subject to Exhibit 1.4.2 (CSU) to protect ephemeral streams.

All lands are subject to Exhibit 1.6.1 (CSU) to protect shallow groundwater resources.

All lands are subject to Exhibit 1.6.2 (CSU) to protect groundwater resources during hydraulic fracturing.

All lands are subject to Exhibit 1.8.1 (Lease Notice) to protect against radioactive materials.

All lands are subject to Exhibit 1.10.1 (CSU) to protect 25-35% slopes and shale soils.

All lands are subject to Exhibit 1.11.1 (NSO) to protect lands prone to mass movement.

All lands are subject to Exhibit 1.13.1 (CSU) to protect biological soil crusts.

All lands are subject to Exhibit 2.1.1 (NSO) to protect threatened, endangered, proposed and candidate plants.

All lands are subject to Exhibit 2.2.1 (CSU) to protect sensitive plants.

All lands are subject to Exhibit 3.8.1 (Lease Notice) to protect migratory birds.

All lands are subject to Exhibit 3.9.1 (NSO) to protect raptors.

All lands are subject to Exhibit 3.9.2 (TL) to protect raptors.

All lands are subject to Exhibit 3.10.1 (TL) to protect big game parturition areas.

All lands are subject to Exhibit 3.10.2 (CSU) to protect big game winter range and production areas.

All lands are subject to Exhibit 3.13.1 (NSO) to protect State Wildlife Areas.

All lands are subject to Exhibit CO-29 to alert lessee of PFYC 4 and 5 paleontological area inventory requirement.

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

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

All lands are subject to Exhibit CO-56 (Lease Notice) to alert lessees of potential supplementary air analysis.

The following lands are subject to Exhibit 1.3.1 (NSO) to protect perennial water bodies: T.0410N., R.0130W., NMPM

Section 3: Lot 1-4, Section 3: SWNW, S2SE, SESW; Section 4: Lot 1-2, Lot 4 Section 4: SENE, NWSW, NESE, S2S2; Section 5: Lot 1 Section 5: SENE, N2SE, SWSE, W2SW;

The following lands are subject to Exhibit 1.3.2 (CSU) to protect perennial water bodies: <u>T.0410N., R.0130W., NMPM</u>

Section 3: Lot 1-4 Section 3: S2NW, S2SE, SESW; Section 4: Lot 1-4; Section 4: S2NE,NWSW,NESE,S2S2; Section 5: Lot 1, Section 5: SENE, N2SE, SWSE, W2SW, SESW;

The following lands are subject to Exhibit 1.9.1 (NSO) to protect greater than 35% slopes: <u>T.0410N., R.0130W., NMPM</u>

Section 3: Lot 1-4; Section 3: S2N2,S2; Section 4: Lot 4; Section 4: S2NE,NWSW,NESE,S2S2; Section 5: SW, E2SE;

PVT/BLM; COS:TRFO

PARCEL ID: 7373

<u>T.0410N., R.0130W., NMPM</u> Section 6: Lot 2-7; Section 6: SWNE,SENW; Section 6: NESW,N2SE,SESE; Dolores County Colorado 503.640 Acres

All lands are subject to Exhibit 1.4.1 (NSO) to protect ephemeral streams.

All lands are subject to Exhibit 1.4.2 (CSU) to protect ephemeral streams.

All lands are subject to Exhibit 1.6.1 (CSU) to protect shallow groundwater resources.

All lands are subject to Exhibit 1.6.2 (CSU) to protect groundwater resources during hydraulic fracturing.

All lands are subject to Exhibit 1.8.1 (Lease Notice) to protect against radioactive materials.

All lands are subject to Exhibit 1.10.1 (CSU) to protect 25-35% slopes and shale soils.

All lands are subject to Exhibit 1.11.1 (NSO) to protect lands prone to mass movement.

All lands are subject to Exhibit 1.13.1 (CSU) to protect biological soil crusts.

All lands are subject to Exhibit 2.1.1 (NSO) to protect threatened, endangered, proposed and candidate plants.

All lands are subject to Exhibit 2.2.1 (CSU) to protect sensitive plants.

All lands are subject to Exhibit 3.8.1 (Lease Notice) to protect migratory birds.

All lands are subject to Exhibit 3.9.1 (NSO) to protect raptors.

All lands are subject to Exhibit 3.9.2 (TL) to protect raptors.

All lands are subject to Exhibit 3.10.1 (TL) to protect big game parturition areas.

All lands are subject to Exhibit 3.10.2 (CSU) to protect big game winter range and production areas.

All lands are subject to Exhibit CO-29 to alert lessee of PFYC 4 and 5 paleontological area inventory requirement.

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

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

All lands are subject to Exhibit CO-56 (Lease Notice) to alert lessees of potential supplementary air analysis.

The following lands are subject to Exhibit 1.3.1 (NSO) to protect perennial water bodies: T.0410N., R.0130W., NMPM

Section 6: Lot 3-5, 7 Section 6: NESE, SESE;

The following lands are subject to Exhibit 1.3.2 (CSU) to protect perennial water bodies: T.0410N., R.0130W., NMPM

Section 6: Lot 3-5, 7 Section 5: N2SE, SESE;

The following lands are subject to Exhibit 1.7.1 (NSO) to protect reservoirs and lakes: Section 6: Lot 3-6 Section 6: SENW, NESW, N2SE, SESE;

The following lands are subject to Exhibit 1.9.1 (NSO) to protect greater than 35% slopes:

<u>T.0410N., R.0130W., NMPM</u> Section 6: Lot 2; Section 6: SESE;

PVT/BLM; COS:TRFO

PARCEL ID: 7390

T.0420N., R.0130W., NMPM

Section 31: Lot 3,4;

Section 31: N2NE,SENE,NENW; Section 31: E2SW,SWSE; Section 32: N2,N2SW,SESW,SE; Section 33: ALL;

Dolores County Colorado 1612.350 Acres

All lands are subject to Exhibit 1.4.1 (NSO) to protect ephemeral streams.

All lands are subject to Exhibit 1.4.2 (CSU) to protect ephemeral streams.

All lands are subject to Exhibit 1.6.1 (CSU) to protect shallow groundwater resources.

All lands are subject to Exhibit 1.6.2 (CSU) to protect groundwater resources during hydraulic fracturing.

All lands are subject to Exhibit 1.8.1 (Lease Notice) to protect against radioactive materials.

All lands are subject to Exhibit 1.10.1 (CSU) to protect 25-35% slopes and shale soils.

All lands are subject to Exhibit 1.11.1 (NSO) to protect lands prone to mass movement.

All lands are subject to Exhibit 1.13.1 (CSU) to protect biological soil crusts.

All lands are subject to Exhibit 2.1.1 (NSO) to protect threatened, endangered, proposed and candidate plants.

All lands are subject to Exhibit 2.2.1 (CSU) to protect sensitive plants.

All lands are subject to Exhibit 3.8.1 (Lease Notice) to protect migratory birds.

All lands are subject to Exhibit 3.9.1 (NSO) to protect raptors.

All lands are subject to Exhibit 3.9.2 (TL) to protect raptors.

All lands are subject to Exhibit 3.10.1 (TL) to protect big game parturition areas.

All lands are subject to Exhibit 3.10.2 (CSU) to protect big game winter range and production areas.

All lands are subject to Exhibit 3.13.1 (NSO) to protect State Wildlife Areas.

All lands are subject to Exhibit CO-29 to alert lessee of PFYC 4 and 5 paleontological area inventory requirement.

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

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

All lands are subject to Exhibit CO-56 (Lease Notice) to alert lessees of potential supplementary air analysis.

The following lands are subject to Exhibit 1.3.1 (NSO) to protect perennial water bodies: T.0420N., R.0130W., NMPM

Section 31: Lot 3, 4; Section 31: NESW, SWSE; Section 32: E2, S2NW, N2SW, SESW; Section 33: NWSE, SW, E2NW, NWNW;

The following lands are subject to Exhibit 1.3.2 (CSU) to protect perennial water bodies: T.0420N., R.0130W., NMPM

Section 31: Lot 3, 4; Section 31: E2SW, SWSE, NESW, NWNE, NENE, SENE; Section 32: E2, S2NW, N2SW, SESW; Section 33: N2SE, SW, E2NW, NWNW;

The following lands are subject to Exhibit 1.7.1 (NSO) to protect Reservoirs and Lakes: Section 31: E2SW, SWSE, SENE; Section 32: SWNW, NWSW;

The following lands are subject to Exhibit 1.9.1 (NSO) to protect greater than 35% slopes: T.0420N., R.0130W., NMPM

Section 31: SWSE; Section 32: W2NE, NENW, S2NW, SESW; Section 33: N2NE;

PVT/BLM; COS:TRFO

ATTACHMENT D: Stipulation Descriptions

EXHIBIT 1.3.1

Lease Number: Parcels 7371, 7372, 7373, and 7390

NO SURFACE OCCUPANCY STIPULATION Perennial Streams, Water Bodies, Riparian Areas, and Fens

This stipulation applies to the lands identified for special stipulations in Attachment C: Parcels Recommended for Lease with Applied Stipulations.

No surface occupancy or use is allowed subject to the following special operating constraints:

Prohibit surface occupancy and surface-disturbing activities within a minimum buffer distance of 325 horizontal feet for all perennial waters. For perennial streams, the buffer would be measured from the ordinary high water mark (bankfull stage), whereas for wetland features, the buffer would be measured from the edge of the mapped extent (Table H.1). For unmapped wetlands, the vegetative boundary (from which the buffer originates) would be determined in the field. Where the riparian zone extends beyond 325 feet, the NSO stipulation would be extended to include the entire riparian zone.

Table H.1: No Surface Occupancy Buffers for Perennial Waters

| Water Body Type | Buffer Width (feet) |
|--|--|
| Fens and wetlands | 325* |
| Perennial streams (with or without fish) | 325 (as measured from ordinary high water mark) |
| Lotic or lentic springs and seeps | 325 (as measured from wetland vegetation edge) |
| Riparian | 325 (or greater if riparian area is wider than 325 feet) |

*See Modification.



* Wetland buffer dimensions may be averaged to accommodate variability in terrain or development plans. Up-gradient distances should be maintained (i.e., up- gradient buffer distances of 325 feet), while down-gradient buffers may be reduced to no less than 100 feet. The buffer averaging must, however, not adversely affect wetland functions and values, and a minimum buffer distance of 100 feet from the wetland edge is maintained. The buffer's intent is to protect the water source area of the wetland, which is more important than the down-gradient portion of the wetland.

For the purpose of:

Maintaining the proper functioning condition, including the vegetative, hydrologic and geomorphic functionality of the perennial water body. Protecting water quality, fish habitat,

aquatic habitat, and providing a clean, reliable source of water for downstream users. Buffers are expected to indirectly benefit migratory birds, wildlife habitat, amphibians, and other species.

Justification:

Wetlands, floodplains, riparian areas, water influence zones, and fens represent important ecological components and functions, such as storing water, stabilizing valley floors, enhancing water quality, and providing recreation and aesthetic values, biological diversity, and wildlife species with habitat, water, food, cover, and travel routes. They are easily disturbed by ground-disturbing activities that can cause soil erosion, soil compaction, and adverse changes to the hydrologic function that is important to maintaining the hydrologic and ecological integrity of these lands.

Exceptions, modifications, and waivers

The following waiver, exception, and modification criteria would apply to all stipulations:

Exception: The Authorized Officer may grant an exception to a stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently such that 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, or 2) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

Modification: The Authorized Officer may modify a stipulation or the area subject to the stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently. The Authorized Officer may modify a stipulation as a result of new information if 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, 2) the protection provided by the stipulation is no longer sufficient to meet resource objectives established in the LRMP, or 3) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

Waiver: The Authorized Officer may waive a stipulation if it is determined that the factors leading to its inclusion in the lease no longer exist. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

EXHIBIT 1.3.2

Lease Number: Parcels 7371, 7372, 7373, and 7390

CONTROLLED SURFACE USE STIPULATION Perennial Streams, Water Bodies, Riparian Areas, and Fens

This stipulation applies to the lands identified for special stipulations in Attachment C: Parcels Recommended for Lease with Applied Stipulations.

Surface occupancy or use is subject to the following special operating constraints:

From 325 to 500 horizontal feet from the perennial water body, Controlled Surface Use (CSU) restrictions would apply. Surface-disturbing activities may require special engineering design, construction and implementation measures, including re-location of operations beyond 656 feet (200 meters) to protect water resources within the 325 foot No Surface Occupancy (NSO) buffer. For perennial streams, the buffer would be measured from ordinary high water mark (bankfull stage), whereas for wetland features, the buffer would be measured from the edge of the mapped extent (Table H.2). For unmapped wetlands, the vegetative boundary (from which the buffer originates) would be determined in the field.

Table H.2: Controlled Surface Use buffers for perennial waters.

| Water Body Type | Buffer Width (feet) |
|--|---|
| Fens and wetlands | 325-500* |
| Perennial streams (with or without fish) | 325-500 (as measured from ordinary high water mark) |
| Lotic or lentic springs and seeps | 325-500 (as measured from wetland vegetation edge) |



For the purpose of:

Maintaining the proper functioning condition, including the vegetative, hydrologic, and geomorphic functionality of the perennial water body, to protect water quality, fish habitat, and aquatic habitat and provide a clean, reliable source of water for downstream users. Buffers are expected to indirectly benefit migratory birds, wildlife habitat, amphibians, and other species.

Justification:

Minimizing potential deterioration of water quality; maintaining natural hydrologic function and condition of stream channels, banks, floodplains, and riparian communities; and preserving wildlife habitat. The buffers are sized to accommodate the rivers' larger floodplains and wider riparian zones.

Exceptions, modifications, and waivers

The following waiver, exception, and modification criteria would apply to all stipulations:

Exception: The Authorized Officer may grant an exception to a stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently such that 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, or 2) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

Modification: The Authorized Officer may modify a stipulation or the area subject to the stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently. The Authorized Officer may modify a stipulation as a result of new information if 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, 2) the protection provided by the stipulation is no longer sufficient to meet resource objectives established in the LRMP, or 3) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

Waiver: The Authorized Officer may waive a stipulation if it is determined that the factors leading to its inclusion in the lease no longer exist. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

EXHIBIT 1.4.1

Lease Number: Parcels 6715, 7371, 7372, 7373, and 7390

NO SURFACE OCCUPANCY STIPULATION Intermittent and Ephemeral Streams

This stipulation applies to the lands identified for special stipulations in Attachment C: Parcels Recommended for Lease with Applied Stipulations.

No surface occupancy or use is allowed subject to the following special operating constraints:

No Surface Occupancy (NSO) of 50 horizontal feet as measured from the top of the stream bank for all intermittent or ephemeral streams (see diagram). If riparian vegetation extends beyond the top of the stream bank, the buffer would be measured from the extent of the riparian vegetation.



For the purpose of:

Maintaining and protecting water quality, stream stability, aquatic health, seasonal use and downstream fisheries, and sediment processes downstream.

Justification:

Minimizing potential deterioration of water quality and maintaining natural hydrologic function and condition of stream channels, banks, floodplains, and riparian communities.

Exceptions, modifications, and waivers

The following waiver, exception, and modification criteria would apply to all stipulations:

Exception: The Authorized Officer may grant an exception to a stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently such that 1) the

protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, or 2) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

Modification: The Authorized Officer may modify a stipulation or the area subject to the stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently. The Authorized Officer may modify a stipulation as a result of new information if 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, 2) the protection provided by the stipulation is no longer sufficient to meet resource objectives established in the LRMP, or 3) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

Waiver: The Authorized Officer may waive a stipulation if it is determined that the factors leading to its inclusion in the lease no longer exist. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

EXHIBIT 1.4.2

Lease Number: Parcels 6715, 7371, 7372, 7373, and 7390

CONTROLLED SURFACE USE STIPULATION Intermittent and Ephemeral Streams

This stipulation applies to the lands identified for special stipulations in Attachment C: Parcels Recommended for Lease with Applied Stipulations.

Surface occupancy or use is subject to the following special operating constraints:

Controlled Surface Use (CSU) from the edge of the No Surface Occupancy (NSO) buffer to 100 horizontal feet. Avoid locating roads, stream crossings, and facilities within this zone, because activities within this area can potentially affect streams and water quality. Adequate professional design and engineering of activities in this zone is necessary to prevent storm-water runoff and sedimentation. Measurement is from the top of the stream bank, although if wetland vegetation exists, then the measurement is from the vegetation's edge.

For the purpose of:

Minimizing the risk of sedimentation, spills, and other contaminants reaching intermittent and/or ephemeral streams to protect water quality, stream function, and aquatic habitat.

Justification: CSU in this zone would minimize potential deterioration of water quality, maintain natural hydrologic function and condition of stream channels, banks, floodplains, and riparian communities.

Exceptions, modifications, and waivers

The following waiver, exception, and modification criteria would apply to all stipulations:

Exception: The Authorized Officer may grant an exception to a stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently such that 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, or 2) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

Modification: The Authorized Officer may modify a stipulation or the area subject to the stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently. The Authorized Officer may modify a stipulation as a result of new information if 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, 2) the protection provided by the stipulation is no longer sufficient to meet resource objectives established in the LRMP, or 3) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of

development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

Waiver: The Authorized Officer may waive a stipulation if it is determined that the factors leading to its inclusion in the lease no longer exist. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

EXHIBIT 1.6.1

Lease Number: Parcels 6715, 7371, 7372, 7373, and 7390

CONTROLLED SURFACE USE STIPULATION Groundwater Resources (Shallow)

This stipulation applies to the lands identified for special stipulations in Attachment C: Parcels Recommended for Lease with Applied Stipulations.

Surface occupancy or use is subject to the following special operating constraints:

Oil and gas surface operations over shallow (<2,000 feet) potentially usable groundwater (<10,000 total dissolved solids) shall use the following protection measures:

- Pitless, self-contained drilling systems.
- In the completion of an oil, gas, injection, disposal, or service well, where acidizing or fracture processes are used, no deleterious substances shall be permitted to pollute subsurface water.
- Flowback and stimulation fluids would be contained within tanks that are placed on a well pad or in a lined, bermed area.
- Fluids, additives, and other materials used for drilling and completion operations must be protective of public health and the environment in the areas where they are used.
- For well where a multi-stage high volume hydraulic fracturing is anticipated, the operators shall indicate the method used to handle, transport, and dispose of the recovered fluids.

For the purpose of:

Minimizing the risk of spills and other contaminants reaching potentially usable groundwater with a water table up to 2,000 feet that is near the surface.

Justification:

Controlled Surface Use (CSU) would minimize the risk of water quality contamination and maintain the integrity of potentially usable groundwater resources for present and future uses.

Exceptions, modifications, and waivers

The following waiver, exception, and modification criteria would apply to all stipulations:

Exception: The Authorized Officer may grant an exception to a stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently such that 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, or 2) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

Modification: The Authorized Officer may modify a stipulation or the area subject to the stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently. The Authorized Officer may modify a stipulation as a result of new information if 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, 2) the protection provided by the stipulation is no longer sufficient to meet resource objectives established in the LRMP, or 3) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

Waiver: The Authorized Officer may waive a stipulation if it is determined that the factors leading to its inclusion in the lease no longer exist. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

EXHIBIT 1.6.2

Lease Number: Parcels 6715, 7371, 7372, 7373, and 7390

CONTROLLED SURFACE USE STIPULATION Groundwater Resources

This stipulation applies to the lands identified for special stipulations in Attachment C: Parcels Recommended for Lease with Applied Stipulations.

Surface occupancy or use is subject to the following special operating constraints.

Oil and gas operations using multi-stage hydraulic fracturing shall use the following measures to protect potentially usable water bearing intervals:

- The placement of all stimulation fluids shall be confined to the objective formation to the extent practicable.
- In all directions a minimum of 2,500 feet of buffer distance (or greater if deemed necessary by BLM) between the well bore (production string) and the lower extent of shallow (<2,000 feet), potentially usable groundwater (<10,000 total dissolved solids) aquifer, shall be maintained so that fractures from the hydraulic fracturing process do not intersect shallow aquifers.
- A continuous column of cement shall extend from the surface casing shoe back to ground level. If cement is not circulated to surface, then a remedial cement job shall be performed to ensure complete cement coverage.
- A cement bond log shall be required in the surface string.
- Surface casing set depth shall be at least 50 feet below any potentially usable water bearing interval.
- Pitless, self-contained drilling systems.
- In the completion of an oil, gas, injection, disposal, or service well, where acidizing or fracture processes are used, no deleterious substances shall be permitted to pollute subsurface water.
- Fluids, additives, and other materials used for drilling and completion operations must be protective of public health and the environment in the areas where they are used.
- Operators shall indicate the method used to handle, transport, and dispose of the recovered fluids.
- Upon request of the BLM, operators shall provide reports that disclose the complete chemical makeup of all materials used in the proposed and actual drilling and stimulation fluids without regard to original source additive.

For the purpose of:

Protecting potentially usable groundwater.

Justification:

Controlled Surface Use (CSU) would minimize the risk of groundwater contamination and maintain the integrity of potentially usable water bearing intervals for present and future uses.

Exceptions, modifications, and waivers

The following waiver, exception, and modification criteria would apply to all stipulations:

Exception: The Authorized Officer may grant an exception to a stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently such that 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, or 2) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

Modification: The Authorized Officer may modify a stipulation or the area subject to the stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently. The Authorized Officer may modify a stipulation as a result of new information if 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, 2) the protection provided by the stipulation is no longer sufficient to meet resource objectives established in the LRMP, or 3) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

Waiver: The Authorized Officer may waive a stipulation if it is determined that the factors leading to its inclusion in the lease no longer exist. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

EXHIBIT 1.7.1

Lease Number: Parcels 7373 and 7390

NO SURFACE OCCUPANCY STIPULATION Reservoirs and Lakes

No surface occupancy or use is allowed subject to the following special operating constraints:

For reservoirs and lakes one acre or larger as measured by the high water mark, No Surface Occupancy (NSO) is stipulated within 0.25 mile of the high water shoreline.

For the purpose of:

Protecting water quality and the scenic, recreation, wetland, and wildlife values associated with the lake or reservoir and its shoreline.

Justification:

Oil and gas development is incompatible with the emphasized use of these areas.

Exceptions, modifications, and waivers

The following waiver, exception, and modification criteria would apply to all stipulations:

Exception: The Authorized Officer may grant an exception to a stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently such that 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, or 2) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

Modification: The Authorized Officer may modify a stipulation or the area subject to the stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently. The Authorized Officer may modify a stipulation as a result of new information if 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, 2) the protection provided by the stipulation is no longer sufficient to meet resource objectives established in the LRMP, or 3) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

Waiver: The Authorized Officer may waive a stipulation if it is determined that the factors leading to its inclusion in the lease no longer exist. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and

may consult with other government agencies and/or the public in order to make this determination.

EXHIBIT 1.8.1

Lease Number: Parcels 6715, 7371, 7372, 7373, and 7390

LEASE NOTICE Technologically Enhanced Naturally Occurring Radioactive Materials

This stipulation applies to the lands identified for special stipulations in Attachment C: Parcels Recommended for Lease with Applied Stipulations.

Oil and gas operations targeting shale formations have the potential to bring to the surface, and concentrate, naturally occurring radioactive materials. These operations can lead to the spread of radioactive contamination and potential human health risks. Wells targeting shale gas plays are subject to the following special sampling requirements:

- All exploratory wells targeting shale gas formations shall obtain a representative sample of cuttings from the targeted formation and complete analysis in accordance with General Provision 3.1.6 of the Colorado Department of Public Health and the Environment (CDPHE) Interim Policy and Guidance Pending Rulemaking for Control and Disposition if Technologically-Enhanced Naturally Occurring Radioactive Materials in Colorado, or the equivalent provisions of any future rulemaking decision. The results shall be provided to the San Juan National Forest and Tres Rios Field Office.
- During the first multi-stage hydraulic fracturing of a well targeting shale gas in any given section, representative samples of cuttings, flowback fluids, produced waters, and sludge shall be analyzed in accordance with General Provision 3.1.6 of the CDPHE Interim Policy and Guidance Pending Rulemaking for Control and Disposition if Technologically-Enhanced Naturally Occurring Radioactive Materials in Colorado, or the equivalent provisions of any future rulemaking decision. The results shall be provided to the San Juan National Forest and Tres Rios Field Office.
EXHIBIT 1.9.1

Lease Number: Parcels 7371, 7372, 7373, and 7390

NO SURFACE OCCUPANCY STIPULATION Lands with Slopes Greater Than 35 Percent

This stipulation applies to the lands identified for special stipulations in Attachment C: Parcels Recommended for Lease with Applied Stipulations.

No surface occupancy or use is allowed subject to the following special operating constraints:

Lands with slopes greater than 35 percent.

For the purpose of:

Preventing mass movement and the associated loss of soil productivity, preventing damage to structures and equipment, and protecting riparian areas, wetlands, and aquatic ecosystems from sedimentation and for safety reasons.

Justification: Slopes greater than 35 percent have high to very high potential for mass movement and excessive sheet erosion especially when they are impacted by ground-disturbing management activities. These lands are also very difficult to reclaim following disturbance.

Exceptions, modifications, and waivers

The following waiver, exception, and modification criteria would apply to all stipulations:

Exception: The Authorized Officer may grant an exception to a stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently such that 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, or 2) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

Modification: The Authorized Officer may modify a stipulation or the area subject to the stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently. The Authorized Officer may modify a stipulation as a result of new information if 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, 2) the protection provided by the stipulation is no longer sufficient to meet resource objectives established in the LRMP, or 3) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

EXHIBIT 1.10.1

Lease Number: Parcels 6715, 7371, 7372, 7373, and 7390

CONTROLLED SURFACE USE STIPULATION Lands with 25 to 35% Slopes and Lands with Shale Soils

This stipulation applies to the lands identified for special stipulations in Attachment C: Parcels Recommended for Lease with Applied Stipulations.

Surface occupancy or use is subject to the following special operating constraints:

Management activities proposed on those lands would require the lessee to submit an operating plan to an authorized official, which may include special design, construction, and implementation measures (including the relocation of operations by more than 650 feet) that describes how soil erosion, soil compaction, and runoff would be prevented or minimized, and how disturbed sites would be reclaimed.

For the purpose of:

Preventing soil erosion, soil compaction, and runoff and the associated loss of soil productivity, and protecting riparian areas, wetlands, and aquatic ecosystems from sedimentation.

Justification:

Lands with slopes of 25% to 35% and lands with shale soils have moderate to high potential for soil erosion, soil compaction, and runoff particularly when they are impacted by ground-disturbing management activities.

Exceptions, modifications, and waivers

The following waiver, exception, and modification criteria would apply to all stipulations:

Exception: The Authorized Officer may grant an exception to a stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently such that 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, or 2) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

Modification: The Authorized Officer may modify a stipulation or the area subject to the stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently. The Authorized Officer may modify a stipulation as a result of new information if 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, 2) the protection provided by the stipulation is no longer sufficient to meet resource objectives established in the LRMP, or 3) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of

development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

EXHIBIT 1.11.1

Lease Number: Parcels 6715, 7371, 7372, 7373, and 7390

NO SURFACE OCCUPANCY STIPULATION Lands Prone to Mass Movement

This stipulation applies to the lands identified for special stipulations in Attachment C: Parcels Recommended for Lease with Applied Stipulations.

No surface occupancy or use is allowed subject to the following special operating constraints:

Lands prone to mass movement and lands within a 100-foot buffer around those lands. Lands prone to mass movement include canyon escarpments, hill/mountain dip-slopes, lands with unstable geologic formations (including the Morrison, Mancos Shale, Lewis Shale, and Fruitland Formations on the SJNF and TRFO), lands that display evidence of past mass movement (including land slides, land-flows, and land-slumps), lands lacking vegetation (badlands and burned areas), lands with slopes greater than 35%, and lands associated with map units that have high or very high potential for mass movement (including soil survey map units 254, 386, 606, 720, 926, 20511D, 30506D, 34301D, 34306D, 34506D, 50803D, 50806D, 70806D, 70807D, 74803D, 80604D, 80803D, and 80804D).

For the purpose of:

Preventing mass movement and the associated loss of soil productivity, as well as damage to structures and equipment, and for safety reasons.

Justification:

The potential for mass movement and its adverse affects is high to very high for lands prone to mass movement especially when those lands are impacted by ground-disturbing activities. Mass movement could cause ruptured pipelines, water/oil/condensate spills, gas explosions, and damaged storage tanks, and could cause injury to people. Those lands are also very difficult to reclaim.

Exceptions, modifications, and waivers

The following waiver, exception, and modification criteria would apply to all stipulations:

Exception: The Authorized Officer may grant an exception to a stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently such that 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, or 2) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

Modification: The Authorized Officer may modify a stipulation or the area subject to the stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently. The Authorized Officer may modify a stipulation as a result of new information if 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, 2) the protection provided by the stipulation is no longer sufficient to meet resource objectives established in the LRMP, or 3) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

EXHIBIT 1.13.1

Lease Number: Parcels 6715, 7371, 7372, 7373, and 7390

CONTROLLED SURFACE USE STIPULATION Lands with Biological Soil Crusts

This stipulation applies to the lands identified for special stipulations in Attachment C: Parcels Recommended for Lease with Applied Stipulations.

Surface occupancy or use is subject to the following special operating constraints:

On lands with biological soil crusts exhibiting a Level of Darkness class of 4 or above on the soil surface (see Belnap et al. 2008). Management activities proposed on those lands would require the lessee to submit an operating plan to an authorized BLM or USFS official, which may include special design, construction, and implementation measures (including the relocation of operations by more than 650 feet) that describes how impacts to biological soil crusts would be prevented or minimized, and how disturbed sites would be reclaimed.

For the purpose of:

Protecting biological soil crusts and the important ecosystems in which they occur.

Justification:

Biological soil crusts (also known as microbiotic or cryptogamic crusts) are unique components of biodiversity and important components of the semi-desert shrublands, semi-desert grasslands, sagebrush shrublands, and pinyon-juniper woodlands on the SJNF and TRFO. They play an important role in ecosystem restoration, they are very sensitive to disturbances, and they are very slow to recover from disturbances (Bowker 2007). Ground-disturbing activities could cause direct effects to biological soil crusts including mortality and could cause soil erosion and soil compaction to the associated soils, which could adversely affect the crusts habitat.

Exceptions, modifications, and waivers

The following waiver, exception, and modification criteria would apply to all stipulations:

Exception: The Authorized Officer may grant an exception to a stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently such that 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, or 2) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

Modification: The Authorized Officer may modify a stipulation or the area subject to the stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently. The Authorized Officer may modify a stipulation as a result of new information if

1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, 2) the protection provided by the stipulation is no longer sufficient to meet resource objectives established in the LRMP, or 3) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

EXHIBIT 2.1.1

Lease Number: Parcels 6715, 7371, 7372, 7373, and 7390

NO SURFACE OCCUPANCY STIPULATION Threatened or Endangered Plants, Plants Proposed for Federal Listing, or Candidate Plants for Federal Listing

This stipulation applies to the lands identified for special stipulations in Attachment C: Parcels Recommended for Lease with Applied Stipulations.

No surface occupancy or use is allowed subject to the following special operating constraints:

Lands occupied by plant species that are federally listed (threatened or endangered), proposed for federal listing, or candidates for federal listing; lands designated as critical habitat for federally listed species; and lands within a 650 foot (i.e., 200 meter) buffer around all those lands.

For the purpose of:

To protect rare plant species and their critical habitat from direct and indirect impacts associated with management actions that could adversely affect their viability and could lead to their extinction.

Justification:

Management actions on the Tres Rios Field Office and San Juan National Forest could affect federally listed plant species (threatened or endangered), plant species proposed for federal listing, and plant species that are candidates for federal listing; and could affect the critical habitat for those species, which could adversely affect the viability of those species and could lead to their extinction.

Exceptions, modifications, and waivers

The following waiver, exception, and modification criteria would apply to all stipulations:

Exception: The Authorized Officer may grant an exception to a stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently such that 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, or 2) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

Modification: The Authorized Officer may modify a stipulation or the area subject to the stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently. The Authorized Officer may modify a stipulation as a result of new information if 1) the protection provided by the stipulation is no longer justified or necessary to meet resource

objectives established in the LRMP, 2) the protection provided by the stipulation is no longer sufficient to meet resource objectives established in the LRMP, or 3) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

EXHIBIT 2.2.1

Lease Number: Parcels 6715, 7371, 7372, 7373, and 7390

CONTROLLED SURFACE USE STIPULATION Colorado Bureau of Land Management State Director's Sensitive Plants and Region 2 Regional Forester's Sensitive Plants

This stipulation applies to the lands identified for special stipulations in Attachment C: Parcels Recommended for Lease with Applied Stipulations.

Surface occupancy or use is subject to the following special operating constraints:

Lands occupied by Colorado BLM State Director's Sensitive Plant Species, Region 2 Regional Forester's Sensitive Plant Species, and on lands within a 325-foot buffer around lands occupied by those plant species. Management activities proposed on those lands would require the lessee to submit an operating plan to a BLM Authorized Official, which may include special design, construction, and implementation measures (including the relocation of operations by more than 650 feet) that describes how impacts to BLM State Director's Sensitive Plant Species and Region 2 Regional Forester's Sensitive Plant Species would be prevented or minimized and how disturbed sites would be reclaimed.

For the purpose of:

Protecting rare plant species and their habitat from direct and indirect impacts associated with management actions that could adversely affect those rare plants.

Justification:

Management actions on the Tres Rios Field Office and the San Juan National Forest could affect Colorado BLM State Director's Sensitive Plant Species, Region 2 Regional Forester's Sensitive Plant Species, and their habitat, which could adversely affect the viability of those species and could lead to a trend to federal listing under the Endangered Species Act.

Exceptions, modifications, and waivers

The following waiver, exception, and modification criteria would apply to all stipulations:

Exception: The Authorized Officer may grant an exception to a stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently such that 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, or 2) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

Modification: The Authorized Officer may modify a stipulation or the area subject to the stipulation if it is determined that the factors leading to its inclusion in the lease have changed

sufficiently. The Authorized Officer may modify a stipulation as a result of new information if 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, 2) the protection provided by the stipulation is no longer sufficient to meet resource objectives established in the LRMP, or 3) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

EXHIBIT 3.2.1

Lease Number: Parcel 6715

CONTROLLED SURFACE USE STIPULATION Lynx Habitat – Landscape Linkage, Denning and Winter Foraging Habitat

This stipulation applies to the lands identified for special stipulations in Attachment C: Parcels Recommended for Lease with Applied Stipulations.

Surface occupancy or use is subject to the following special operating constraints:

Limitations on surface use and/or operational activities may be required. Timing Limitations (especially during winter and/or in lynx habitat) and restrictions on snow compaction activities may be applied in consultation with the U.S. Fish & Wildlife Service (USFWS) as necessary to protect habitat and linkage area function and limit access by potential lynx competitors. Actions would be consistent with direction found in the Lynx Conservation Assessment and Strategy, best available science as determined by the managing agencies and the USFWS, and/or the Southern Rockies Lynx Amendment, each where applicable.

On the lands described below:

- □ Within identified current active denning locations
- □ Within identified landscape linkage areas
- □ Within identified lynx habitat in a Lynx Analysis Unit (LAU)

For the purpose of:

Protection of lynx and lynx habitat in compliance with the Endangered Species Act.

Justification: The Canada lynx is a threatened species, with suitable habitat within portions of the Tres Rios Field Office and San Juan National Forest. Controlled Surface Use would apply in these habitat areas to protect the habitat and the species.

Exceptions, modifications, and waivers

The following waiver, exception, and modification criteria would apply to all stipulations:

Exception: The Authorized Officer may grant an exception to a stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently such that 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, or 2) proposed operations would not cause unacceptable

impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

Modification: The Authorized Officer may modify a stipulation or the area subject to the stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently. The Authorized Officer may modify a stipulation as a result of new information if 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, 2) the protection provided by the stipulation is no longer sufficient to meet resource objectives established in the LRMP, or 3) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

EXHIBIT 3.8.1

Lease Number: Parcels 6715, 7371, 7372, 7373, and 7390

LEASE NOTICE Migratory Birds

This stipulation applies to the lands identified for special stipulations in Attachment C: Parcels Recommended for Lease with Applied Stipulations.

Avoid or minimize disruption of migratory bird nesting activity by siting or prioritizing vegetation clearing, facility construction, and concentrated operational activities (e.g., drilling, completion, utility installation) to avoid the involvement of higher value migratory bird habitats, particularly during the core migratory bird nesting season (April 1–July 15).

EXHIBIT 3.9.1

Lease Number: Parcels 6715, 7371, 7372, 7373, and 7390

NO SURFACE OCCUPANCY STIPULATION Eagles, All Accipiters, Falcons, Buteos, and Owls

This stipulation applies to the lands identified for special stipulations in Attachment C: Parcels Recommended for Lease with Applied Stipulations.

No surface occupancy or use is allowed subject to the following special operating constraints:

Within specified distance from nest and communal winter roost sites, No Surface Occupancy (NSO) would be allowed. Distances are listed in Table H.3.

For the purpose of:

Providing adequate nesting and roost sites to support species populations.

Justification:

These raptor species are known to have failed reproduction and abandon nests and communal winter roost sites when human activity occurs within the specified buffer distances from these sites. To increase the likelihood of successful reproduction and recruitment of these species, and to provide adequate roost sites for utilization of their habitat, NSO would be permitted within the specified buffer distances from nest and roost sites (see Table H.3).

Exceptions, modifications, and waivers

The following waiver, exception, and modification criteria would apply to all stipulations:

Exception: The Authorized Officer may grant an exception to a stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently such that 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, or 2) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

Modification: The Authorized Officer may modify a stipulation or the area subject to the stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently. The Authorized Officer may modify a stipulation as a result of new information if 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, 2) the protection provided by the stipulation is no longer sufficient to meet resource objectives established in the LRMP, or 3) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of

development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

| Table H.3: Rapt | or Conservation Measu | | | |
|------------------|---|---|--|---------------|
| Species | Impact/Risk | Time Frame | Buffer Distance Restrictions | Reference |
| Golden eagle | Disturbance | December 15– July 15 | Project-related activity should not occur within a 0.5 mile of nest during nesting season. (G) | CPW 2008 |
| Golden eagle | Structural improvements * | Year round | New structures must not occur within 0.5-mile radius of active nest. (S) | CPW 2008 |
| Bald eagle | Disturbance | November 15– July 15 | Project-related activity should not occur within 0.5 mile of nest during nesting season. (G) | SJNF and TRFO |
| Bald eagle | Structural improvements * | Year round | New structures must not occur within a 0.5-mile radius of active nest. (S) | SJNF and TRFO |
| Bald eagle | Disturbance | November 15– March 15 | Project-related activity should not occur within a 0.25-mile radius (indirect line of sight) or a 0.5- mile radius (direct line of sight) of communal winter roost site. Limit activity between 1000 and 1400 hours if encroachment would occur within buffer zones. (G) | CPW 2008 |
| Bald eagle | Structural improvements * | Year round | New structures must not occur within 0.5 mile of communal roost site (S) | SJNF and TRFO |
| Bald eagle | Disturbance and structural improvements * | Site specific, to be determined by the project biologist | For preferred diurnal hunting perch | CPW 2008 |
| Osprey | Disturbance ** | April 1–August 31 | Project-related activity should not occur within a 0.25-mile of nest during nesting season. | SJNF and TRFO |
| Osprey | Structural improvements * | Year-round | New structures should not occur within a 0.25-mile radius of active nest. (G) | CPW 2008 |
| Red-tailed hawk | Disturbance | March 1–July 15 | Project-related activity should not occur within 0.125 to 0.25 mile of nest during nesting season, as determined by the project biologist. (G) | SJNF and TRFO |
| Red-tailed hawk | Structural improvements * | Year-round | New structures should not occur within 0.25-mile radius of active nest. (G) | SJNF and TRFO |
| Peregrine falcon | Disturbance | March 15–July 31 | Project-related activity should not occur within 0.5 mile of nest during nesting season. | CPW 2008 |
| Peregrine falcon | Structural improvements * | Year-round | New structures must not occur within 0.5 mile radius of active cliff nest complex. (S) | CPW 2008 |
| Prairie falcon | Disturbance | March 15–July 15 | Project-related activity should not occur within 0.5 mile of nest during nesting season. (G) | CPW 2008 |
| Prairie falcon | Structural | Year-round | New structures must not occur | CPW 2008 |

Table H.3: Raptor Conservation Measures

| Species | Impact/Risk | Time Frame | Buffer Distance | Reference |
|------------------|----------------|------------|--|----------------|
| | | | Restrictions within a 0.5-mile radius of active | |
| | improvements * | | nest. | |
| Northern | Disturbance | March 1– | Project-related activity should not | SJNF and TRFO |
| goshawk | Distilloance | August 31 | occur within 0.5 mile of nest | SJIVE ADD TREO |
| Boomawa | | August 51 | during nesting season. (G) | |
| Northern | Structural | Year-round | New structures should not occur | CPW 2008 |
| goshawk | improvements * | | within a 0.5-mile radius of active | |
| Bernetter | | | nest. (G) | |
| Burrowing owl | Disturbance | March 15- | Project-related activity should not | SJNF and TRFO |
| | | August 15 | occur within 0.25 mile of nest | |
| | | 2 | burrows when owls may be | |
| | | | present during nesting season. (G) | |
| Burrowing owl | Structural | Year-round | New structures should not occur | Romin and Muck |
| | improvements * | | within a 0.25-mile radius of | 2002 |
| | - | | active nests or within occupied | |
| | | | habitat. (G) | |
| All other | Disturbance ** | Varied by | Determination of the application | Romin and Muck |
| accipter, buteo, | | species | of these specific seasonal | 2002 |
| falcon, harrier, | | | restrictions, TL, and/or buffer | |
| and owls | | | distances should be made by the | |
| | | | project biologist, guided by | |
| | | | agency requirements, along with | |
| | | | professional knowledge and | |
| | | | experience. They would be | |
| | | | considered on a case by case | |
| | | | basis, taking into consideration | |
| | | | site-specific factors such as | |
| | | | topography, vegetation, species of raptor, historic patterns of human | |
| | | | activity and infrastructure, and | |
| | | | observed behaviors of individual | |
| | | | birds (G) | |
| All other | Structural | Varied by | Determination of the application | Romin and Muck |
| accipter, buteo, | improvements * | species | of these specific seasonal | 2002 |
| falcon, harrier, | • | | restrictions, TL, and/or buffer | |
| and owls | | | distances should be made by the | |
| | | | project biologist, guided by | |
| | | | agency requirements, along with | |
| | | | professional knowledge and | |
| | | | experience. They would be | |
| | | | considered on a case by case | |
| | | | basis, taking into consideration | |
| | | | site-specific factors such as | |
| | | | topography, vegetation, species of | |
| | | | raptor, historic patterns of human | |
| | | | activity and infrastructure, and | |
| | | | observed behaviors of individual | |
| | | | birds. (G) | |

Structures include improvements such as roads, radio towers, oil wells, etc., proposed following nest establishment and is not
intended to include structures that historically occurred in the area.

** This does not apply to historic levels and patterns of disturbance under which the nest was established and is intended to apply to additional levels and change in disturbance patterns.

Note: "S" indicates an LRMP standard and "G" indicates an LRMP guideline.

EXHIBIT 3.9.2

Lease Number: Parcels 6715, 7371, 7372, 7373, and 7390

TIMING LIMITATION STIPULATION Eagles, All Accipiters, Falcons, Buteos, and Owls

This stipulation applies to the lands identified for special stipulations in Attachment C: Parcels Recommended for Lease with Applied Stipulations.

No surface use is allowed during the following time period(s):

A Timing Limitation (TL) would be applied to lease activities, if surface occupancy is allowed. The TL would apply to all development activities (construction, drilling, workovers, operation, and maintenance). The duration of the timing limitation is species-dependent, and the timing limitations subject to this stipulation are shown in Table H.3.

For the Purpose of:

To protect raptor nests and roost sites.

Justifications:

These raptor species are known to have failed reproduction and abandon nests and communal winter roost sites when human activity occurs within the specified buffer distances from these sites. To increase the likelihood of successful reproduction and recruitment of these species, and to provide adequate roost sites for utilization of their habitat, No Surface Occupancy (NSO) would be permitted within the specified buffer distances from nest and roost sites (see Table H.3).

Exceptions, modifications, and waivers

The following waiver, exception, and modification criteria would apply to all stipulations:

Exception: The Authorized Officer may grant an exception to a stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently such that 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, or 2) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

Modification: The Authorized Officer may modify a stipulation or the area subject to the stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently. The Authorized Officer may modify a stipulation as a result of new information if 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, 2) the protection provided by the stipulation is no longer sufficient to meet resource objectives established in the LRMP, or 3) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of

development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

| Table H.3: Rapt | or Conservation Measu | | | |
|------------------|---|---|--|---------------|
| Species | Impact/Risk | Time Frame | Buffer Distance Restrictions | Reference |
| Golden eagle | Disturbance | December 15– July 15 | Project-related activity should not occur within a 0.5 mile of nest during nesting season. (G) | CPW 2008 |
| Golden eagle | Structural improvements * | Year round | New structures must not occur within 0.5-mile radius of active nest. (S) | CPW 2008 |
| Bald eagle | Disturbance | November 15– July 15 | Project-related activity should not occur within 0.5 mile of nest during nesting season. (G) | SJNF and TRFO |
| Bald eagle | Structural improvements * | Year round | New structures must not occur within a 0.5-mile radius of active nest. (S) | SJNF and TRFO |
| Bald eagle | Disturbance | November 15– March 15 | Project-related activity should not occur within a 0.25-mile radius (indirect line of sight) or a 0.5- mile radius (direct line of sight) of communal winter roost site. Limit activity between 1000 and 1400 hours if encroachment would occur within buffer zones. (G) | CPW 2008 |
| Bald eagle | Structural improvements * | Year round | New structures must not occur within 0.5 mile of communal roost site (S) | SJNF and TRFO |
| Bald eagle | Disturbance and structural improvements * | Site specific, to be determined by the project biologist | For preferred diurnal hunting perch | CPW 2008 |
| Osprey | Disturbance ** | April 1–August 31 | Project-related activity should not occur within a 0.25-mile of nest during nesting season. | SJNF and TRFO |
| Osprey | Structural improvements * | Year-round | New structures should not occur within a 0.25-mile radius of active nest. (G) | CPW 2008 |
| Red-tailed hawk | Disturbance | March 1–July 15 | Project-related activity should not occur within 0.125 to 0.25 mile of nest during nesting season, as determined by the project biologist. (G) | SJNF and TRFO |
| Red-tailed hawk | Structural improvements * | Year-round | New structures should not occur within 0.25-mile radius of active nest. (G) | SJNF and TRFO |
| Peregrine falcon | Disturbance | March 15–July 31 | Project-related activity should not occur within 0.5 mile of nest during nesting season. | CPW 2008 |
| Peregrine falcon | Structural improvements * | Year-round | New structures must not occur within 0.5 mile radius of active cliff nest complex. (S) | CPW 2008 |
| Prairie falcon | Disturbance | March 15–July 15 | Project-related activity should not occur within 0.5 mile of nest during nesting season. (G) | CPW 2008 |
| Prairie falcon | Structural | Year-round | New structures must not occur | CPW 2008 |

Table H.3: Raptor Conservation Measures

| Species | Impact/Risk | Time Frame | Buffer Distance | Reference |
|------------------|----------------|------------|--|----------------|
| | | | Restrictions within a 0.5-mile radius of active | |
| | improvements * | | nest. | |
| Northern | Disturbance | March 1– | Project-related activity should not | SJNF and TRFO |
| goshawk | Distilloance | August 31 | occur within 0.5 mile of nest | SJIVE ADD TREO |
| Boomawa | | August 51 | during nesting season. (G) | |
| Northern | Structural | Year-round | New structures should not occur | CPW 2008 |
| goshawk | improvements * | | within a 0.5-mile radius of active | |
| Bernetter | | | nest. (G) | |
| Burrowing owl | Disturbance | March 15- | Project-related activity should not | SJNF and TRFO |
| | | August 15 | occur within 0.25 mile of nest | |
| | | 2 | burrows when owls may be | |
| | | | present during nesting season. (G) | |
| Burrowing owl | Structural | Year-round | New structures should not occur | Romin and Muck |
| | improvements * | | within a 0.25-mile radius of | 2002 |
| | - | | active nests or within occupied | |
| | | | habitat. (G) | |
| All other | Disturbance ** | Varied by | Determination of the application | Romin and Muck |
| accipter, buteo, | | species | of these specific seasonal | 2002 |
| falcon, harrier, | | | restrictions, TL, and/or buffer | |
| and owls | | | distances should be made by the | |
| | | | project biologist, guided by | |
| | | | agency requirements, along with | |
| | | | professional knowledge and | |
| | | | experience. They would be | |
| | | | considered on a case by case | |
| | | | basis, taking into consideration | |
| | | | site-specific factors such as | |
| | | | topography, vegetation, species of raptor, historic patterns of human | |
| | | | activity and infrastructure, and | |
| | | | observed behaviors of individual | |
| | | | birds (G) | |
| All other | Structural | Varied by | Determination of the application | Romin and Muck |
| accipter, buteo, | improvements * | species | of these specific seasonal | 2002 |
| falcon, harrier, | • | | restrictions, TL, and/or buffer | |
| and owls | | | distances should be made by the | |
| | | | project biologist, guided by | |
| | | | agency requirements, along with | |
| | | | professional knowledge and | |
| | | | experience. They would be | |
| | | | considered on a case by case | |
| | | | basis, taking into consideration | |
| | | | site-specific factors such as | |
| | | | topography, vegetation, species of | |
| | | | raptor, historic patterns of human | |
| | | | activity and infrastructure, and | |
| | | | observed behaviors of individual | |
| | | | birds. (G) | |

Structures include improvements such as roads, radio towers, oil wells, etc., proposed following nest establishment and is not
intended to include structures that historically occurred in the area.

** This does not apply to historic levels and patterns of disturbance under which the nest was established and is intended to apply to additional levels and change in disturbance patterns.

Note: "S" indicates an LRMP standard and "G" indicates an LRMP guideline.

EXHIBIT 3.10.1

Lease Number: Parcels 6715, 7372, 7373, and 7390

TIMING LIMITATION STIPULATION Big Game Parturition

This stipulation applies to the lands identified for special stipulations in Attachment C: Parcels Recommended for Lease with Applied Stipulations.

No surface use is allowed during the following time period(s):

In areas mapped as big game parturition areas for:

- Pronghorn antelope fawning areas (on SJNF and TRFO lands this includes the overall range for the species): May 1 through July 1
- Elk calving areas: May 15 through June 30
- Rocky Mountain bighorn sheep lambing: April 15 through June 30
- Desert bighorn sheep lambing: February 1 through May 1

For the purpose of:

Parturition areas are critical habitat in maintaining herd sustainability. Disturbance during critical times can result in mortality and loss of reproductive recruitment into the population.

Justifications:

In order to reduce behavioral disruption during parturition and early young rearing period.

Exceptions, modifications, and waivers

The following waiver, exception, and modification criteria would apply to all stipulations:

Exception: The Authorized Officer may grant an exception to a stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently such that 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, or 2) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

Modification: The Authorized Officer may modify a stipulation or the area subject to the stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently. The Authorized Officer may modify a stipulation as a result of new information if 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, 2) the protection provided by the stipulation is no longer sufficient to meet resource objectives established in the LRMP, or 3) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of

development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

EXHIBIT 3.10.2

Lease Number: Parcel Numbers 6715, 7372, 7373, and 7390

CONTROLLED SURFACE USE STIPULATION Severe Winter Range, Winter Concentration and Mule Deer Critical Winter Range and Big Game Production Areas

This stipulation applies to the lands identified for special stipulations in Attachment C: Parcels Recommended for Lease with Applied Stipulations.

Surface occupancy or use is subject to the following special operating constraints:

In order to provide for healthy ungulate populations capable of meeting state population objectives, anthropomorphic activity and improvements should be designed to maintain and continue to provide effective habitat components that support critical life functions. This includes components of size and quality on the landscape providing connectivity to seasonal habitats (wildlife travel corridors), production areas, severe winter range, and winter concentration areas, along with other habitat components necessary to support herd viability.

For the purpose of:

Protecting priority habitats such as winter concentration areas for big game in order to prevent abandonment of critical habitat, and to maintain reproductive success, recruitment, and survival.

Justification:

There is a growing body of evidence that Timing Limitation stipulations on oil and gas development activities are not adequate to protect critical winter habitat and migratory corridors for big game. Managing the concentration and development such as drilling, construction, and the density of surface facilities may be necessary to maintain big game populations in developing areas. Examples may include surface disturbance caps, collocation of facilities, and central gathering facilities, noise reduction, and efforts to minimize traffic and road densities. Routine production activities would be allowed, however workover activities should be handled on a case by case basis.

Exceptions, modifications, and waivers

The following waiver, exception, and modification criteria would apply to all stipulations:

Exception: The Authorized Officer may grant an exception to a stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently such that 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, or 2) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

Modification: The Authorized Officer may modify a stipulation or the area subject to the stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently. The Authorized Officer may modify a stipulation as a result of new information if 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, 2) the protection provided by the stipulation is no longer sufficient to meet resource objectives established in the LRMP, or 3) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

EXHIBIT 3.11.1

Lease Number: Parcel 7371

CONTROLLED SURFACE USE STIPULATION Gunnison Prairie Dog

This stipulation applies to the lands identified for special stipulations in Attachment C: Parcels Recommended for Lease with Applied Stipulations.

Surface occupancy or use is subject to the following special operating constraints:

A survey of the lease area may be required to determine occupation of Gunnison prairie dog. Development of lease parcels that include prairie dog towns would require one or more of the following conservation measures prior to and during lease development:

- Develop a surface use plan of operations with the managing agencies that integrates and coordinates long-term lease development with measures necessary to minimize adverse impacts to prairie dog populations or their habitat.
- Abide by special daily and seasonal restrictions on construction, drilling, product transport, and service activities during the reproductive period (March 1–June 15).
- Incorporate special modifications to facility siting, design, construction, and operation, or No Surface Occupancy to minimize involvement of prairie dog burrow systems.

For the purpose of:

Maintaining the integrity and extent of prairie dog complexes, and protecting high value wildlife habitat and recreation values associated with designated state wildlife areas.

Justification:

Gunnison prairie dog is a designated sensitive species by the managing agencies and a keystone species for the ecosystem.

Exceptions, modifications, and waivers

The following waiver, exception, and modification criteria would apply to all stipulations:

Exception: The Authorized Officer may grant an exception to a stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently such that 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, or 2) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

Modification: The Authorized Officer may modify a stipulation or the area subject to the stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently. The Authorized Officer may modify a stipulation as a result of new information if

1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, 2) the protection provided by the stipulation is no longer sufficient to meet resource objectives established in the LRMP, or 3) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

EXHIBIT 3.13.1

Lease Number: Parcels 7372 and 7390

NO SURFACE OCCUPANCY STIPULATION State Wildlife Areas

This stipulation applies to the lands identified for special stipulations in Attachment C: Parcels Recommended for Lease with Applied Stipulations.

No surface occupancy or use is allowed subject to the following special operating constraints:

In state wildlife areas that have federal mineral estate underlying them, No Surface Occupancy (NSO) and other mitigations would be determined by the managing agencies in cooperation with Colorado Parks and Wildlife (CPW). For Perins Peak State Wildlife Area, this NSO includes the adjacent BLM lands that in combination comprise the Perins Peak Habitat Management Area.

For the purpose of:

Protect high value wildlife habitat and recreation values associated with designated state wildlife areas.

Justification:

The State of Colorado is a partner in natural resource management. Many state wildlife areas were purchased and established utilizing federal dollars to accomplish common management objectives complementing similar managements on the planning area.

Exceptions, modifications, and waivers

The following waiver, exception, and modification criteria would apply to all stipulations:

Exception: The Authorized Officer may grant an exception to a stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently such that 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, or 2) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

Modification: The Authorized Officer may modify a stipulation or the area subject to the stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently. The Authorized Officer may modify a stipulation as a result of new information if 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, 2) the protection provided by the stipulation is no longer sufficient to meet resource objectives established in the LRMP, or 3) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of

development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

EXHIBIT 4.9.1

Lease Number: Parcel 7371

NO SURFACE OCCUPANCY STIPULATION High Scenic Integrity Objective and Visual Resource Management Class II Areas

This stipulation applies to the lands identified for special stipulations in Attachment C: Parcels Recommended for Lease with Applied Stipulations.

No surface occupancy or use is allowed on the lands described below:

Foreground areas with a high scenic integrity objective or Visual Resource Management (VRM) Class II (Note: very high scenic integrity objective and VRM Class I are all within wilderness, recommended wilderness, and wilderness study areas and are therefore not available for lease).

For the purpose of:

Protecting the scenic values of these areas.

Justification:

These are the areas where viewers have an expectation for high scenic integrity within the foreground viewshed, and where the landscape is to be managed for an overall high scenic integrity objective. Oil and gas exploration and production is typically incompatible with the maintenance of a high scenic integrity and generally inconsistent with protection of valued cultural viewsheds. Oil and gas development introduces industrial facilities and ground disturbance which contrast with natural features.

Exceptions, modifications, and waivers

The following waiver, exception, and modification criteria would apply to all stipulations:

Exception: The Authorized Officer may grant an exception to a stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently such that 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, or 2) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

Modification: The Authorized Officer may modify a stipulation or the area subject to the stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently. The Authorized Officer may modify a stipulation as a result of new information if 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, 2) the protection provided by the stipulation is no longer sufficient to meet resource objectives established in the LRMP, or 3) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of

development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

Lease Number: All Leases

Paleontological Resources

This stipulation applies to the lands identified for special stipulations in Attachment C: Parcels Recommended for Lease with Applied Stipulations .

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 such as monitoring in any area of Probable Fossil Yield Classification (PFYC) 4 or 5 and also 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 may require the relocation of the surface disturbance activity over 200 meters. Inventory and any subsequent mitigation shall be conducted by a BLM permitted paleontologist.

Lease Number: All Leases

Endangered Species Act Section 7 Consultation Stipulation

This stipulation applies to the lands identified for special stipulations in Attachment C: Parcels Recommended for Lease with Applied Stipulations.

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

Lease Number: All Leases

CONTROLLED SURFACE USE STIPULATION Cultural Resources

This stipulation applies to the lands identified for special stipulations in Attachment C: Parcels Recommended for Lease with Applied Stipulations.

Surface occupancy or use is subject to the following special operating constraints:

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.

For the purpose of:

Assuring protection of 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.

Justification:

Historic properties and/or resources must be protected under the above referenced acts.

Exceptions, modifications, and waivers

The following waiver, exception, and modification criteria would apply to all stipulations:

Exception: The Authorized Officer may grant an exception to a stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently such that 1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, or 2) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

Modification: The Authorized Officer may modify a stipulation or the area subject to the stipulation if it is determined that the factors leading to its inclusion in the lease have changed sufficiently. The Authorized Officer may modify a stipulation as a result of new information if

1) the protection provided by the stipulation is no longer justified or necessary to meet resource objectives established in the LRMP, 2) the protection provided by the stipulation is no longer sufficient to meet resource objectives established in the LRMP, or 3) proposed operations would not cause unacceptable impacts. The Authorized Officer may require additional plans of development, surveys, mitigation proposals, or environmental analysis, and may consult with other government agencies and/or the public in order to make this determination.

Lease Number: All Leases

LEASE NOTICE Air Quality

This stipulation applies to the lands identified for special stipulations in Attachment C: Parcels Recommended for Lease with Applied Stipulations.

Due to potential air quality concerns, supplementary air quality analysis may be required for any proposed development of this lease. This may include preparing a comprehensive emissions inventory, performing air quality modeling, and initiating interagency consultation with affected land managers and air quality regulators to determine potential mitigation options for any predicted significant impacts from the proposed development. Potential mitigation may include limiting the time, place, and pace of any proposed development, as well as providing for the best air quality control technology and/or management practices necessary to achieve area-wide air resource protection objectives. Mitigation measures would be analyzed through the appropriate level of NEPA analysis to determine effectiveness, and will be required or implemented as a permit condition of approval (COA). At a minimum, all projects and permitted uses implemented under this lease will comply with all applicable National Ambient Air Quality Standards and ensure Air Quality Related Values are protection under the Clean Air Act (CAA).

ATTACHMENT E: Responses to Public Comments

Note: This section will contain BLM's responses to comments received during the public comment period.