

# APPENDIX P

## LEASING REFORM AND MASTER LEASING PLANS

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### P.1 INTRODUCTION

The MLP concept, introduced in May 2010 via the Washington Office's Oil and Gas Leasing Reform IM 2010-117, promotes a proactive approach to planning for oil and gas development. Generally, the BLM uses RMPs to make oil and gas planning decisions, such as areas closed to leasing, open to leasing, or open to leasing with major or moderate constraints (lease stipulations) based on known resource values and reasonably foreseeable oil and gas development scenarios. However, this policy acknowledged that additional planning and analysis may be necessary in some areas prior to new oil and gas leasing because of changing circumstances, updated policies, and new information.

To determine whether or not circumstances warrant additional planning and analysis, IM 2010-117 lists numerous criteria to be considered. Specifically, the BLM must prepare an MLP when all four of the following criteria are met:

- A substantial portion of the area to be analyzed in the MLP is not currently leased.
- There is a majority federal mineral interest.
- The oil and gas industry has expressed a specific interest in leasing, and there is a moderate or high potential for oil and gas confirmed by the discovery of oil and gas in the general area.
- Additional analysis or information is needed to address likely resource or cumulative impacts if oil and gas development were to occur where there are:
  - multiple-use or natural/cultural resource conflicts;
  - impacts on air quality;
  - impacts on the resources or values of any unit of the NPS, national wildlife refuge, or National Forest wilderness area, as

determined after consultation or coordination with the NPS, the US Fish and Wildlife Service, or the Forest Service; or

- impacts on other specially designated areas.

The BLM has the discretion to complete an MLP for areas that do not meet the MLP criteria. For example, even though a substantial portion of an area is already leased or lacks a majority federal mineral interest, additional analysis of measures to resolve potential resource conflicts may benefit future leasing decisions.

The MLP process entails analyzing likely development scenarios and varying levels of protective design features and mitigation measures in a defined area with greater detail than a traditional RMP allocation analysis but at a less site-specific level than a development plan that has been fully defined by an operator.

Because the BLM began this planning process in 2008 and had prepared the majority of the Draft RMP/EIS prior to the adoption of IM 2010-117, the phrase “Master Leasing Plan” is generally absent from the Draft RMP/EIS. However, the alternatives analyzed capture in detail the components of an MLP for the area described in the Shale Ridges and Canyons Master Leasing Plan Recommendation.

Chapter 2 of the Draft RMP/EIS, Alternatives, details the proposed Alternatives A through D considered. The “No Action” alternative, Alternative A, is the continuation of present management direction and current prevailing conditions based on existing planning decisions and amendments. Alternative B seeks to balance resources among competing human interests, land uses, and the conservation of natural and cultural resource values, while sustaining the ecological integrity of certain key habitats for plant, wildlife, and fish species. Alternative C emphasizes non-consumptive use and management of resources through protection, restoration, and enhancement, while also providing for multiple uses, including livestock grazing and mineral development. Alternative D emphasizes active management for natural resources, commodity production, and public use opportunities.

Chapter 3 of the Draft RMP/EIS, Affected Environment, describes the existing biological, physical, and socioeconomic characteristics of the planning area, including human uses that could be affected by implementing the alternatives described in Chapter 2. Resource and resource use discussions include a description of current conditions and a characterization of trends expressing the direction of change between the present and some point in the past.

Chapter 4 of the Draft RMP/EIS, Environmental Consequences, presents the likely direct, indirect, and cumulative impacts on the human and natural environment that could occur from implementing the alternatives presented in Chapter 2.

## P.2 MASTER LEASING PLAN PROPOSAL

In August 2010, the Wilderness Society and the Center for Native Ecosystems submitted recommendations that the BLM prepare a Shale Ridges and Canyons MLP. This proposal encompasses 908,600 acres, including 640,700 acres of BLM-administered surface land and 700,900 acres of federal mineral estate (see **Figure P-1**, Surface Management and Split Estate). The externally recommended MLP is within the GJFO boundary and overlaps with most of the northern half of the RMP planning area.

### P.2.1 MLP Nominated Areas Criteria Analysis

**Criterion #1: A substantial portion of the area to be analyzed in the MLP is not currently leased.**

The externally recommended Shale Ridges and Canyons MLP area does not meet this criterion. There are 648,900 acres currently open to leasing within the externally recommended MLP area. As shown in **Figure P-2**, Oil and Gas Leases, 482,200 of those acres (74 percent) are currently leased for oil and gas development.

**Criterion #2: There is a majority federal mineral interest.**

The externally recommended Shale Ridges and Canyons MLP area meets this criterion. The GJFO has jurisdiction over 640,700 surface acres (71 percent of the externally recommended MLP area), and 700,900 acres of federal mineral estate (77 percent of the externally recommended MLP area).

**Criterion #3: The oil and gas industry has expressed a specific interest in leasing, and there is a moderate or high potential for oil and gas confirmed by the discovery of oil and gas in the general area.**

The externally recommended Shale Ridges and Canyons MLP area meets this criterion. Approximately 686,300 acres (98 percent) of the federal mineral estate within the externally recommended MLP area is considered to have development potential for oil and gas (see **Figure P-3**, Oil and Gas Potential). Of that area, 211,900 acres (31 percent) is unleased and would be subject to the stipulations proposed in the Draft RMP/EIS and discussed below.

There are 400 producing federal wells within the externally recommended MLP boundary. Industry continues to express interest in leasing within the externally recommended MLP area.

**Criterion #4: Additional analysis or information is needed to address likely resource or cumulative impacts if oil and gas development were to occur where there are multiple use or natural/cultural resource conflicts; impacts on air quality; impacts on the resources or values of any unit of the NPS; or impacts on other specially designated areas.**

The externally recommended Shale Ridges and Canyons MLP meets this criterion. The external MLP proposal focused primarily on concerns regarding fish and wildlife, special status species, recreation, Citizen Wilderness Proposals,

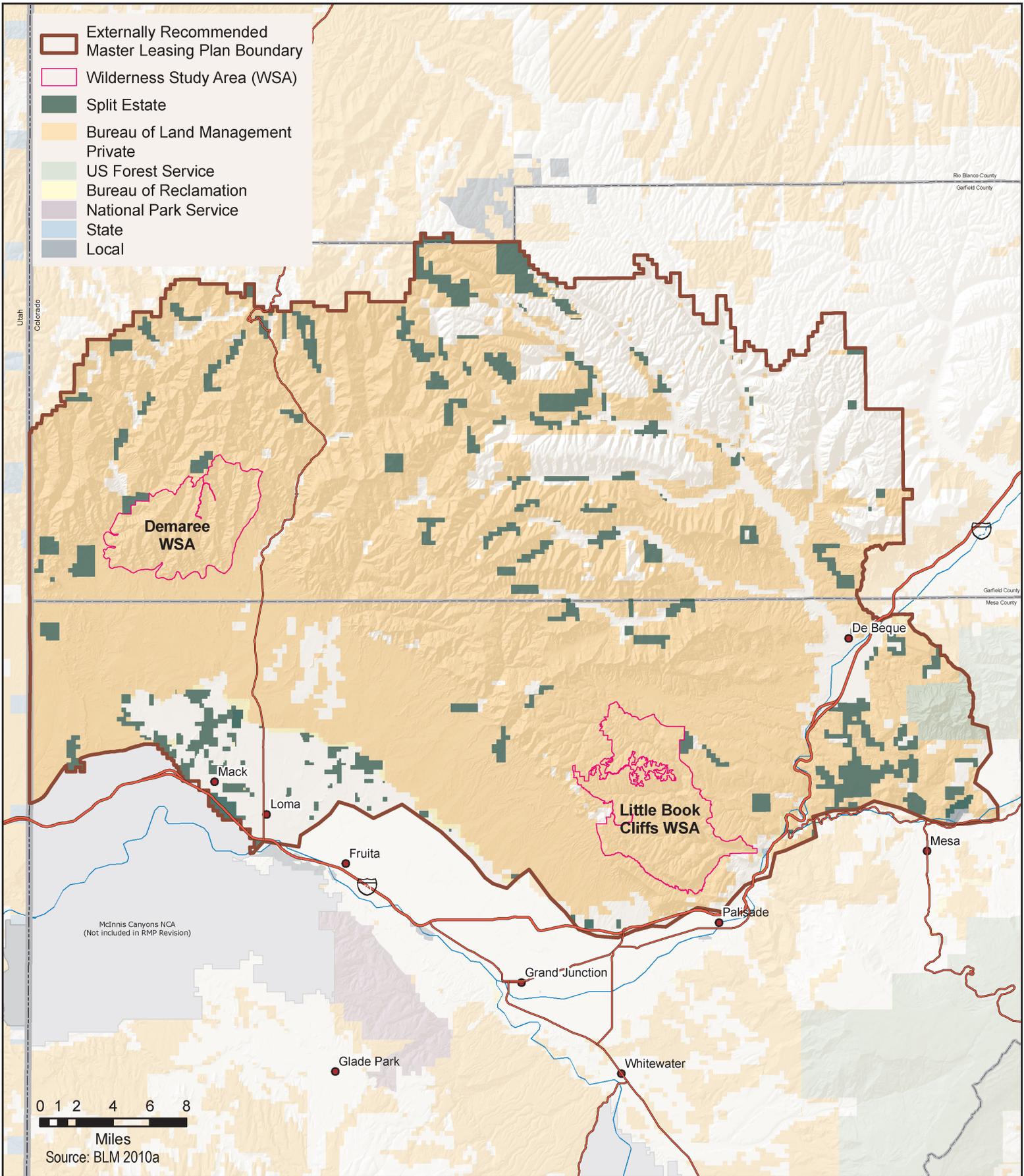
ACECs, and CNHP Potential Conservation Areas (PCAs). According to IM 2010-117, other important national and local resource issues that should be considered when developing an MLP include air quality; Special Recreation Management Areas; nearby state, tribal, or other federal agency lands; cultural resources; paleontological resources; visual resources; watershed conditions, including steep slopes and fragile soils; municipal watersheds; public health and safety; and the ability to achieve interim and final reclamation standards.

### P.2.2 Potential Resource Conflicts

The external proposal identified a series of potential resource conflicts, displayed in **Table P-1**, Potential Resource Conflicts. All of those resources and uses are fully addressed in this appendix.

**Table P-1**  
**Potential Resource Conflicts**

<b>Resource/Use</b>	<b>Not Present</b>	<b>Present/Not Protected</b>	<b>Present/May be Protected</b>
Land Ownership			X
Recreation and Tourism			X
Greater Sage-grouse			X
Aridlands Burrowing Mammal Communities			X
Big Game and Wide-ranging Mammals			X
Raptors			X
Fishing			X
Rare Plants			X
Citizen Wilderness Proposals			X



## Surface Management and Split Estate



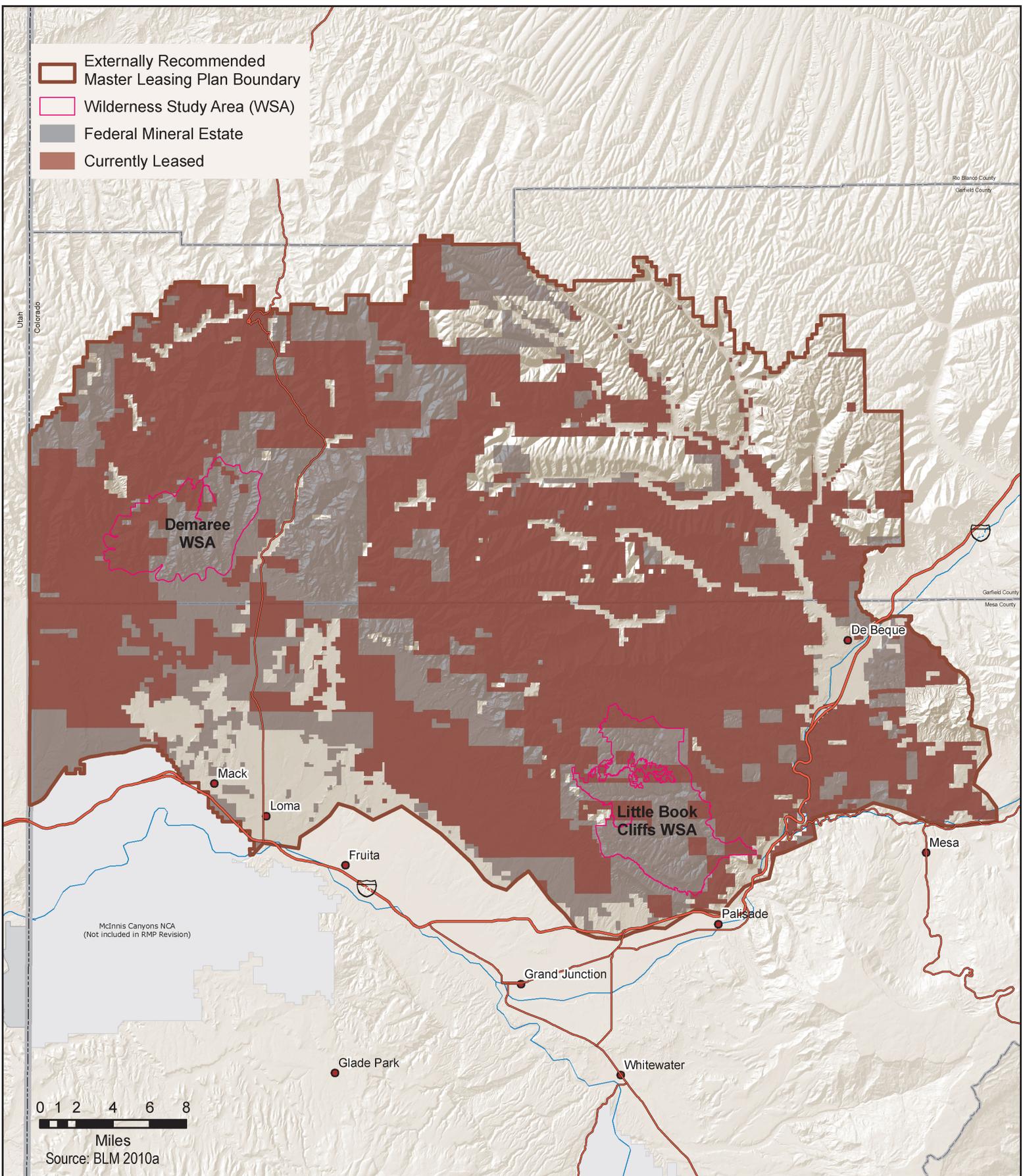
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Figure P-1

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-  Externally Recommended Master Leasing Plan Boundary
-  Wilderness Study Area (WSA)
-  Federal Mineral Estate
-  Currently Leased



0 1 2 4 6 8  
 Miles  
 Source: BLM 2010a



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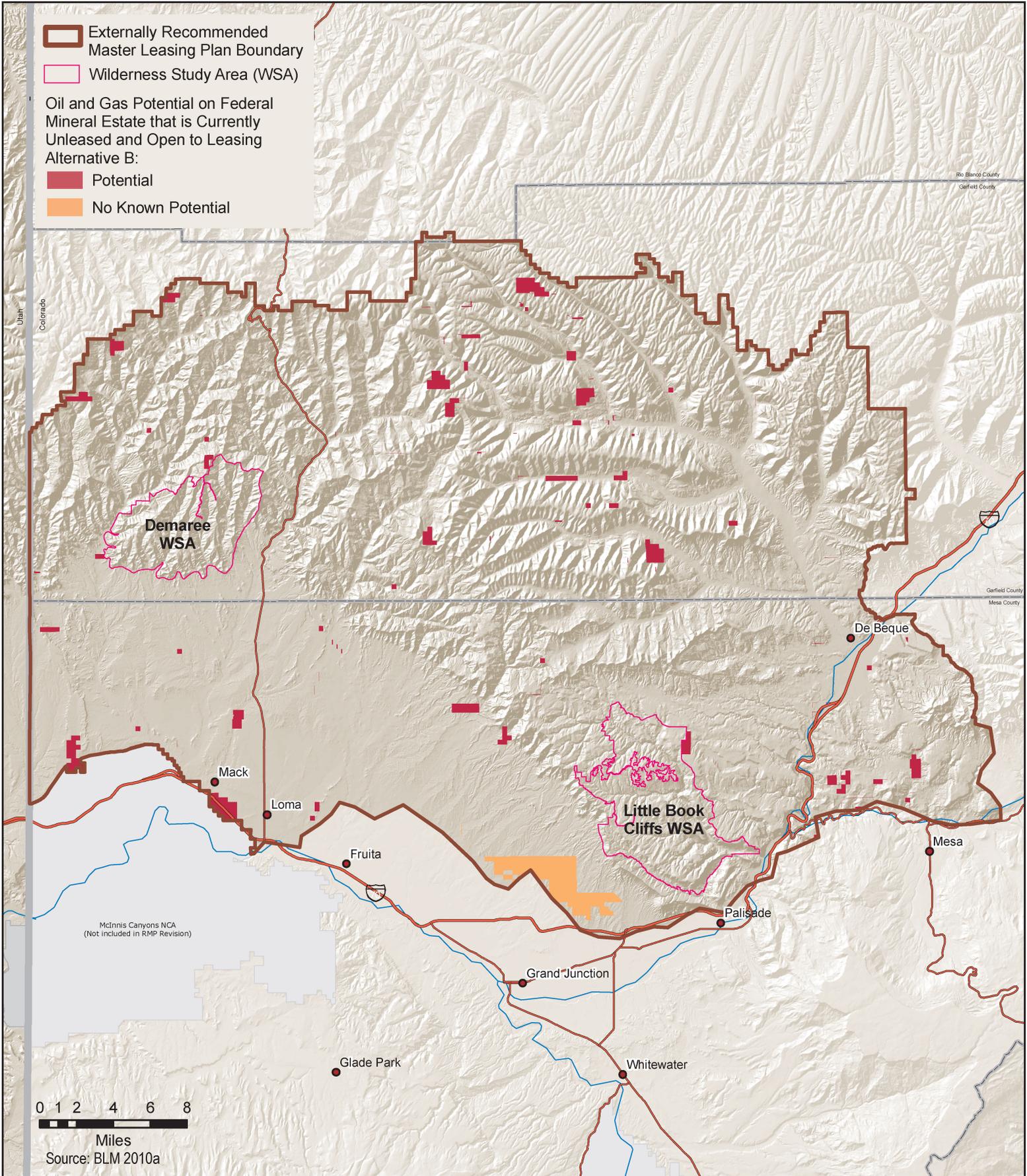
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## Oil and Gas Leases

Figure P-2

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-  Externally Recommended Master Leasing Plan Boundary
  -  Wilderness Study Area (WSA)
- Oil and Gas Potential on Federal Mineral Estate that is Currently Unleased and Open to Leasing Alternative B:
-  Potential
  -  No Known Potential



0 1 2 4 6 8  
 Miles  
 Source: BLM 2010a



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## Oil and Gas Potential

Figure P-3

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### P.3 RESOURCE CONCERNS ADDRESSED IN THE GJFO RMP/EIS

The following sections delineate the key concerns identified in the external MLP proposal and corresponding protection measures in the GJFO Draft RMP/EIS.

The Draft RMP/EIS proposes stipulations for multiple resources that would apply to oil and gas leasing. **Table P-2**, Acres Managed with Conditions of Approval and Lease Stipulations for Alternatives A through D within the Externally Recommended MLP, displays, by alternative, the stipulations applied to currently unleased acreage that is open to leasing within the externally recommended MLP boundary. Because some stipulations, including NSOs for cultural resources, definable streams, lentic riparian areas, TLs for special status species, and others, are not mapped, the actual acreages where stipulations are applied is higher than shown in the table.

**Table P-2**  
**Acres Managed with Conditions of Approval and Lease Stipulations**  
**for Alternatives A through D within the Externally Recommended MLP**

Alternative	Currently Unleased and Open to Leasing	NSO	CSU	TL
A	163,000	76,100	44,700	36,700
B	162,400	76,900	101,100	73,200
C	93,300	50,000	84,800	35,300
D	163,000	61,800	84,400	71,700

**Figure P-4**, Stipulations in Alternative B, shows the stipulations that would be applied to BLM-administered surface land and split estate that is currently unleased and would be open to leasing.

#### P.3.1 Air Quality

The Draft RMP/EIS proposes several management actions to reduce impacts on air quality, including the following requirements:

- Within one year of the Record of Decision, require that all new and existing drill rig engines meet US Environmental Protection Agency Tier 2 (Alternative B) or Tier 4 (Alternative C) Nonroad Diesel Engine Emission Standards or meet equivalent emission standards, regardless of when they begin operation.
- Under Alternative C, require as a condition of approval green completions, involving recovery and clean-up of natural gas. Prohibit flaring and venting of natural gas, except during emergency situations.
- Under Alternative B, require as a condition of approval green completions, involving recovery and clean-up of natural gas. Prohibit

flaring and venting of natural gas, except during emergency situations, well completion operations, initial production tests, subsequent well tests, and well plugging and maintenance.

- Under Alternative C, temporarily close designated routes as needed during wind events to reduce particulate matter (e.g. during National Weather Service high wind warning). Closures would apply to designated routes and off-highway vehicle Open areas under Alternative B.
- Under Alternatives B, C, and D, require proper road design, construction, and surfacing on BLM authorized roads to reduce fugitive dust emissions.

### **P.3.2 Soil and Water Resources**

The Draft RMP/EIS includes several proposed stipulations to protect soil and water resources.

#### **Soil Resources**

Under Alternative B, there would be a CSU stipulation for fragile soils, and an NSO for slumping soils and slopes greater than or equal to 40 percent. Under Alternative C, all three of those resources would be covered by an NSO stipulation. In addition, under Alternatives B and C, a CSU stipulation would be applied to slopes between 25 and 40 percent and mapped Mancos Shale and saline soils.

Alternative D would include the NSO stipulation for slopes greater than or equal to 40 percent.

#### **Water Resources**

Alternatives B and C propose the following stipulations to protect water resources:

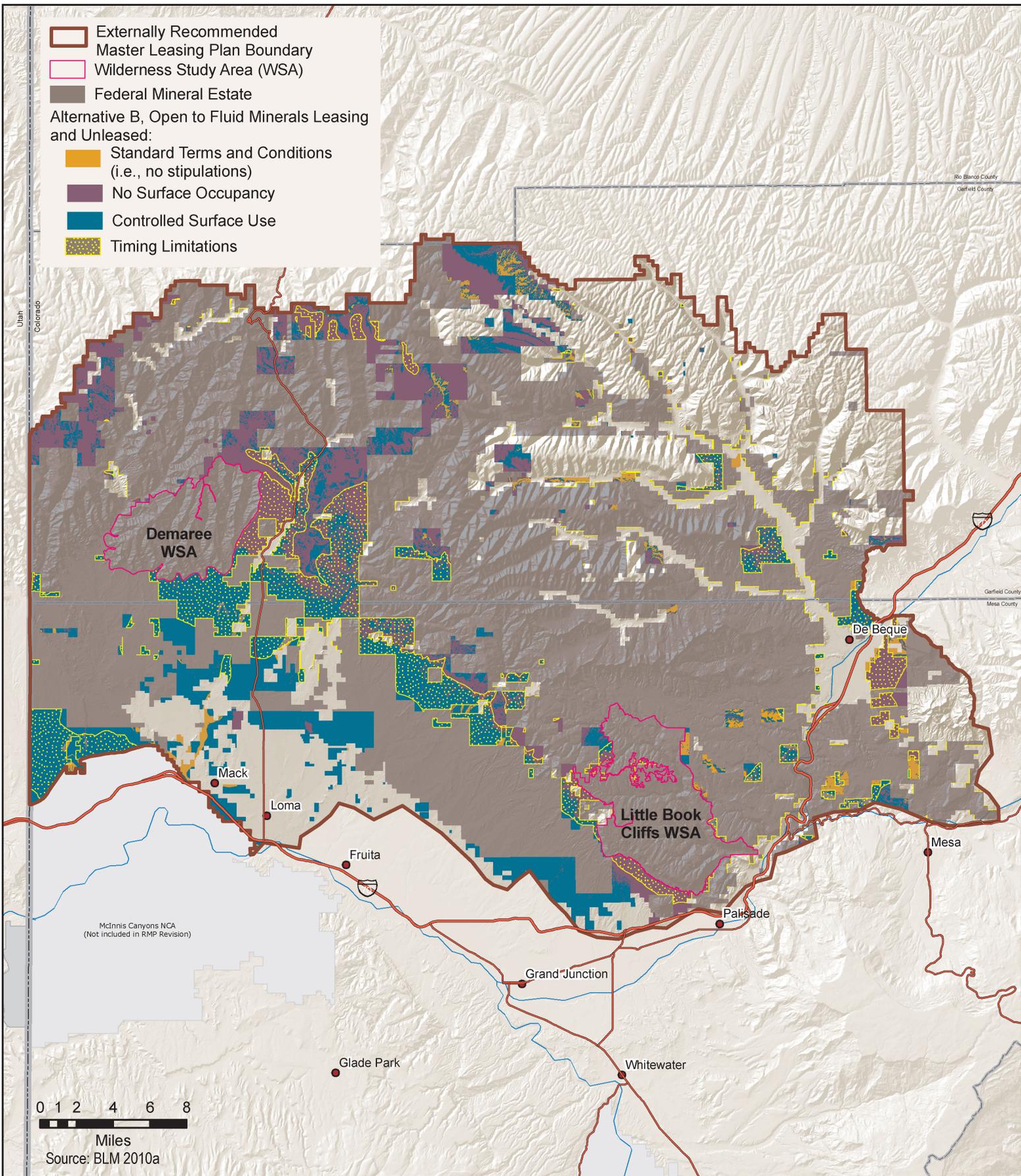
- An NSO would be applied to the Colorado River corridor;
- An NSO would be applied to stream and springs possessing lotic riparian characteristics;
- A CSU (Alternative B) or NSO (Alternative C) would be applied to definable streams;
- An NSO would be applied to lentic riparian areas; and
- A CSU would be applied to the Colorado River corridor, extending 0.25- to 0.5-miles landward from the identified NSO buffer.

-  Externally Recommended Master Leasing Plan Boundary
-  Wilderness Study Area (WSA)

 Federal Mineral Estate

Alternative B, Open to Fluid Minerals Leasing and Unleased:

-  Standard Terms and Conditions (i.e., no stipulations)
-  No Surface Occupancy
-  Controlled Surface Use
-  Timing Limitations



## Stipulations in Alternative B



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Figure P-4

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Additional relevant management actions under Alternatives B and C include:

- Oil and gas operations near domestic water supplies using a groundwater well or spring will be restricted. Siting of oil and gas operations may be permitted following NEPA analysis conducted for a specific location, and the application of protections that may include conditions of approval, mitigation and design features developed in the NEPA analysis, and the regulations at 43 CFR 3101.1-2.
- For projects that propose to disturb riparian vegetation and channels, requiring professionally engineered design, construction, maintenance, and reclamation plans to mitigate to the fullest extent practicable riparian resource damage associated with the proposed action.

Alternative D proposes a CSU stipulation within 500 feet from the edge of any hydrologic feature including perennial, intermittent, and streams, wetlands (including fens), lakes, springs, and seeps; and

### **P.3.3 Vegetation and Special Status Plant Species**

The external recommendation identified concerns regarding rare plants and other native plant species in the Shale Ridges and Canyons proposed MLP area. The proposal stated that this MLP area contains some of the highest concentrations of globally rare plants in the state, and requested that BLM adequately protect habitat and address the potential direct, indirect, and cumulative impacts on rare plants.

The Draft RMP/EIS proposes the following stipulations and management actions to protect vegetation and special status plant species:

- A CSU stipulation would be applied to all old growth forests and woodlands under Alternatives B, C, and D.
- The following ACECs would be managed as ROW Exclusion to protect threatened and endangered species habitat. An NSO stipulation would also be applied.
  - Atwell Gulch (Alternatives B and C);
  - Pyramid Rock (Alternatives B, C, and D); and
  - South Shale Ridge (Alternatives B and C).
- A portion (1,800 acres) of Badger Wash ACEC would be managed as ROW Exclusion to protect special status species habitat under Alternatives B, C, and D.
- The following Lease Notice would be applied under Alternatives B, C, and D: The operator is required to conduct a biological inventory prior to approval of operations in areas of known or

suspected habitat of special status species, or habitat of other species of interest such as but not limited to raptor nests, sage-grouse leks, or significant natural plant communities. The operator, in coordination with the BLM, shall use the inventory to prepare mitigating measures to reduce the impacts on affected species or their habitats. These mitigating measures may include, but are not limited to, relocation of roads, well pads, pipelines, and other facilities, and fencing operations or habitat. Where impacts cannot be mitigated to the satisfaction of the BLM's Authorized Officer, surface occupancy on that area is prohibited.

- The following Lease Notice would be applied under Alternatives A, B, C, and D: This lease contains habitat for the Colorado hookless cactus (*Sclerocactus glaucus*). Prior to undertaking any activity on the lease, including surveying and staking of well locations, the lessee may be required to perform botanical inventories on the lease. Special design and construction measures may also be required in order to minimize impacts on Colorado hookless cactus habitat from drilling and producing operations.
- An NSO stipulation would be applied Alternatives B and C within 656 feet of current and historically occupied, and known habitat of threatened, endangered, proposed, and candidate plants under Alternatives B and C.
- An NSO stipulation would be applied under Alternative D within 656 feet of known habitat of threatened, endangered, proposed, and candidate plants.
- An NSO stipulation would be applied under Alternative B within 328 feet of BLM Sensitive plant species occupied habitat.
- An NSO stipulation would be applied under Alternative C within 656 feet of BLM Sensitive plant species current and historically occupied, known, and suitable habitat.
- An NSO stipulation would be applied under Alternatives B, C, and D within 656 feet of current and historically occupied habitat and within 66 feet of suitable habitat for DeBeque phacelia.
- A CSU stipulation would be applied under Alternatives B and C within those plant communities that meet BLM's criteria for significant plant communities that can require special design, construction, and implementation measures, including relocation of operations by more than 656 feet.
- A CSU stipulation would be applied under Alternative D within those plant communities that meet BLM's criteria for significant plant communities.

### **P.3.4 Lands With Wilderness Characteristics**

The external recommendation identified several Citizen Wilderness proposals, including Hunter Canyon, South Shale Ridge, and Cow Ridge. These areas were identified for their rugged landscapes, biological diversity, geological uniqueness, presence of rare plants, and wildlife value.

BLM's wilderness inventory (see **Appendix F**) identified six units with wilderness characteristics within the externally proposed MLP area (East Demaree, East Salt Creek, Hunter Canyon, South Shale Ridge, Spink Canyon, and Spring Canyon, totaling 103,200 acres). Eighty-three percent of those acres are currently leased and would not be subject to any new fluid minerals stipulations of this RMP or a new MLP.

Under the preferred alternative, none of these units would be managed to protect their wilderness characteristics. However, overlapping designations and allocations (e.g., ACECs, wildlife emphasis areas) and their associated protections would result in 79,600 acres (77 percent) of the 103,200 acres being subject to NSO stipulations.

Under Alternative C, all six units would be closed to fluid mineral leasing.

The Cow Ridge citizen wilderness proposal area is also within the externally recommended MLP boundary. The BLM does not consider this area to meet the criteria for further consideration. In addition, the BLM wilderness inventory included five other areas that did not meet the criteria for further consideration.

### **P.3.5 Sage-grouse**

The external recommendation identified concerns regarding overlap of the Shale Ridges and Canyons area with sensitive sage-grouse habitat, including mapped production habitat and a core area, and proximity to leks. The proposal notes the species' vulnerability to a wide range of disturbances associated with oil and gas development, and requests a federal mineral withdrawal for all mapped priority sage-grouse habitats within the Shale Ridges and Canyons area.

The externally recommended MLP boundary contains greater sage-grouse habitat and the Draft RMP/EIS proposes several stipulations and management actions to reduce impacts from oil and gas development:

- Areas within a 4-mile radius of sage-grouse leks would be managed as ROW Exclusion under Alternative B. This restriction would apply to below-ground facilities under Alternative C.
- Sage-grouse occupied habitat and areas within a 4-mile radius of sage-grouse leks would be managed as ROW Avoidance under Alternative B. This restriction would be expanded to cover suitable habitat under Alternative C.

- All occupied habitat would be closed to leasing under Alternative C, including on split-estate.
- The Sunnyside and Roan and Carr Creeks Wildlife Emphasis Areas (14,500 and 17,700 acres, respectively) would be managed to protect sage-grouse habitat under Alternative B. An NSO stipulation would be applied to the Sunnyside Wildlife Emphasis Area and a CSU stipulation would be applied to the Roan and Carr Creeks Wildlife Emphasis Area.
- The Sunnyside Wildlife Emphasis Area and Roan and Carr Creeks ACEC (11,300 and 33,600 acres, respectively) would be managed to protect sage-grouse habitat under Alternative C. An NSO stipulation would be applied to both areas.
- The Roan and Carr Creeks Wildlife Emphasis Area (33,400 acres) would be managed to protect sage-grouse habitat under Alternative D. A CSU stipulation would be applied to this area.
- A TL stipulation would be applied to all occupied winter habitat from December 16 to March 15 under Alternatives B and C.
- An NSO stipulation would be applied to prohibit surface occupancy and surface-disturbing activities within 4 miles of an active lek or within sage-grouse nesting and early brood-rearing habitat under Alternatives B and C.
- A CSU stipulation would be applied to protect sage-grouse nesting and early brood rearing habitat within 4 miles of an active lek or within sage-grouse nesting and early brood-rearing habitat under Alternatives B and C.
- A TL stipulation would be applied within 4 miles of sage-grouse leks from March 1 to June 30 under Alternative B. Under Alternative D, the TL would cover a 0.6-mile radius.

### **P.3.6 White-tailed Prairie Dog**

The external recommendation identified concerns regarding active white-tailed prairie dog burrow complexes within the Shale Ridges and Canyons area. The species is a Species of Greatest Conservation Need and is considered “most pressing” in the Colorado Comprehensive Wildlife Conservation Strategy. In addition, prairie dogs are prey for raptors and help to sustain raptor populations in the area. The proposal requests eliminating or minimizing potential disturbances associated with oil and gas development near burrow complexes.

The southern portion of the externally recommended MLP boundary contains white-tailed prairie dog habitat, and the Draft RMP/EIS proposes several stipulations and management actions to reduce impacts from oil and gas development:

- The Prairie Canyon Wildlife Emphasis Area (22,200 acres) would be managed to protect white-tailed prairie dog habitat under Alternative B. NSO (2,800 acres) and CSU stipulations (16,600 acres) would be applied in the area.
- The Prairie Canyon area would be managed as an ACEC (6,900 acres) and Wildlife Emphasis Area (15,300 acres) to protect white-tailed prairie dog habitat under Alternative C. Both areas would be closed to leasing.
- An NSO applied to active white-tailed prairie dog towns under Alternative B. This stipulation would be expanded to within 150 feet of active towns under Alternative C.
- A CSU applied within active white-tailed prairie dog towns and to avoid the center of active towns, while maintaining the integrity of the town's social structure under Alternative D.
- A TL stipulation to prohibit surface occupancy and surface-disturbing activities within active white-tailed prairie dog towns from April 1 to July 15 under Alternative D.

### **P.3.7 Burrowing Owl**

Similar to white-tailed prairie dog, the external recommendation identified concerns regarding burrowing owl burrow complexes in the Shale Ridges and Canyons area. Burrowing owl is a state threatened species, and burrow complexes typically support a highly interrelated community of mammals, avian species, reptiles, and vegetation.

- A TL stipulation would prohibit surface disturbance and human encroachment within 150 feet of active burrows or burrowing owl nest sites from March 15 to October 31 under Alternatives B, C, and D.
- The Prairie Canyon Wildlife Emphasis Area (22,200 acres) would be managed to protect burrowing owl habitat under Alternative B. NSO (2,800 acres) and CSU stipulations (16,600 acres) would be applied in the area.
- The Prairie Canyon area would be managed as an ACEC (6,900 acres) and Wildlife Emphasis Area (15,300 acres) to protect burrowing owl habitat under Alternative C. Both areas would be closed to leasing.

### **P.3.8 Big Game and Wide-ranging Mammals**

The external recommendation identified concerns regarding big game and wide-ranging mammals in the Shale Ridges and Canyons area. The area provides important habitat for mule deer, elk, pronghorn, black bear, and turkey. Portions of the Shale Ridges and Canyons area include elk and mule deer migration corridors.

The Draft RMP/EIS provides protection for big game and wide-ranging mammal habitat through several means. These include using conditions of approval listed in Appendix B and standard operating procedures and best management practices provided in Appendix G, applying a TL stipulation to big game winter range (Alternatives B, C, and D), applying a CSU stipulation to deer and elk migration and movement corridors (Alternatives B and C), and applying an NSO stipulation to elk production areas and pronghorn wintering habitat (Alternatives B, C, and D).

In addition, specific areas of high wildlife value and significance for wildlife species are managed as wildlife emphasis areas. Management actions include closing the areas to leasing and applying NSO and CSU stipulations. The externally recommended MLP area encompasses all or a portion of the following wildlife emphasis areas:

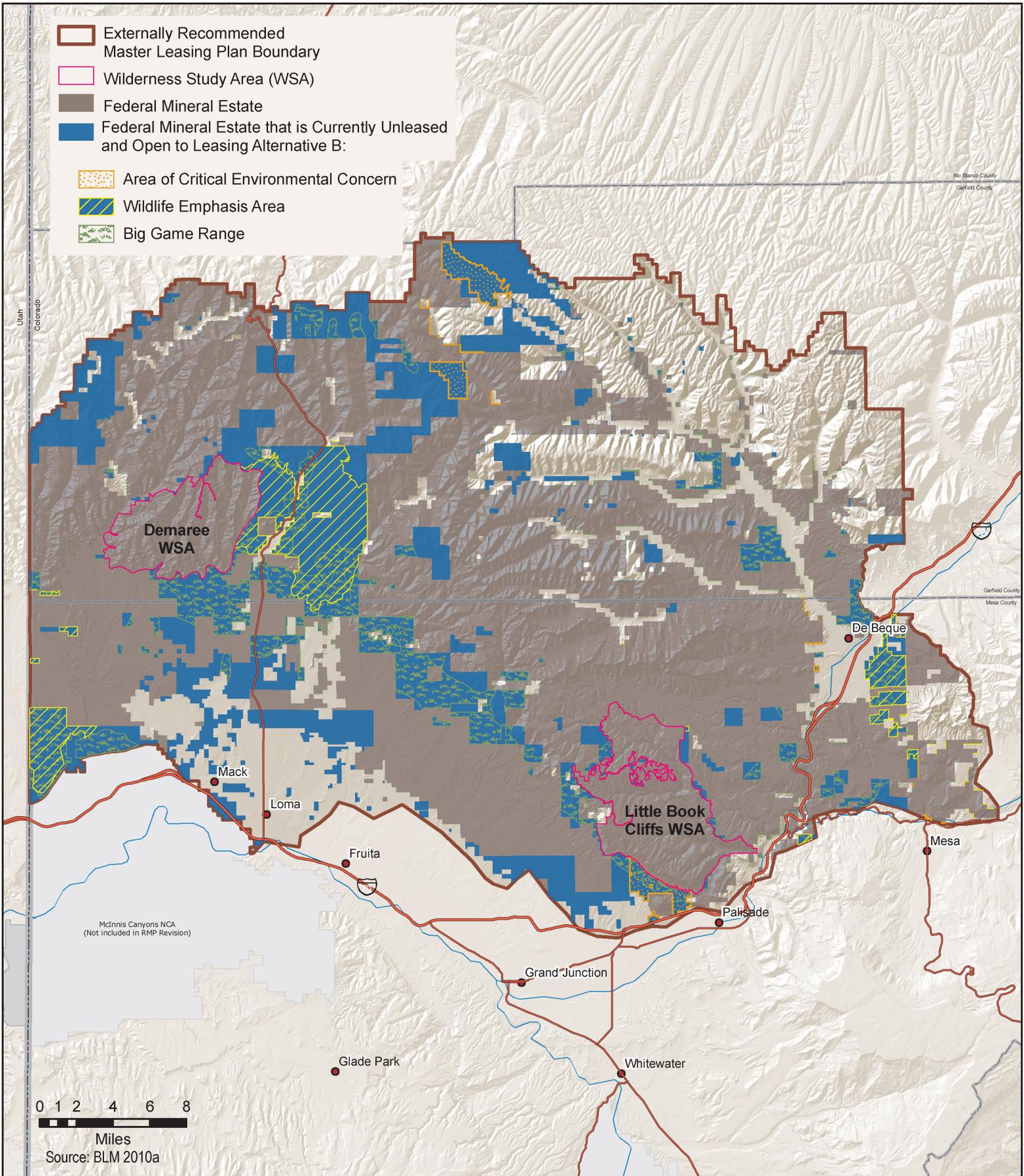
- East Salt Creek (Alternatives B and C);
- Prairie Canyon (Alternatives B and C);
- A portion of Rapid Creek (Alternatives B and C);
- Roan and Carr Creeks (Alternatives B, C, and D);
- South Shale Ridge (Alternatives B and C); and
- Sunnyside (Alternatives B and C).

These areas total 85,000 acres under Alternative B, 57,200 acres under Alternative C, and 33,400 acres under Alternative D. **Figure P-5**, Important Resources in Alternative B, displays the Wildlife Emphasis Areas in Alternative B and whether their acres are currently leased.

Some ACECs within the externally recommended MLP area are managed to protect big game habitat, including the following:

- Atwell Gulch (NSO stipulation applied under Alternative B and closed to leasing under Alternative C);
- Prairie Canyon (closed to leasing under Alternative C); and
- South Shale Ridge (NSO stipulation applied under Alternative B and closed to leasing under Alternative C).

These areas total 31,100 acres under Alternative B and 41,200 acres under Alternative D. **Figure P-5** displays the ACECs in Alternative B and whether their acres are currently leased.



## Important Resources in Alternative B

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Figure P-5

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### **P.3.9 Raptors**

The external proposal requests an analysis of protections for peregrine falcon, bald and golden eagles, and ferruginous hawk habitat, as nesting, roosting, and hunting areas for these species are within the Shale Ridges and Canyons area. The external recommendation also suggests using the US Fish and Wildlife Service's draft guidelines for managing activities in raptor habitat.

Protective measures proposed in the Draft RMP/EIS for these species include the following:

- A CSU stipulation would be applied within 0.5-mile of active ferruginous hawk nest sites and associated alternate nests under Alternatives B and D. Under Alternative C, this measure is applied as an NSO stipulation.
- A TL stipulation would be applied to prohibit human encroachment within 0.25-mile of active ferruginous hawk nests, including any alternate nests, from February 1 to July 15 under Alternatives B, C, and D.
- A CSU stipulation would be applied within 0.5-mile of active peregrine falcon nest sites under Alternatives B and D. Under Alternative C, this measure is applied as an NSO stipulation.
- A TL stipulation would be applied to prohibit human encroachment within 0.5-mile of active peregrine falcon nest cliff(s) from March 15 to July 31 under Alternatives B, C, and D.
- An NSO stipulation would be applied to prohibit surface occupancy and surface-disturbing activities (beyond that which historically occurred in the area) within 0.25-mile of active golden eagle nest sites and associated alternate nests under Alternatives B, C, and D.
- A TL stipulation would be applied to prohibit human encroachment within 0.25-mile of active golden eagle nests and associated alternate nests from December 15 to July 15 under Alternatives B, C, and D.
- An NSO stipulation would be applied to prohibit surface occupancy and surface-disturbing activities (beyond that which historically occurred in the area) within 0.25-mile of active bald eagle nests under Alternatives B, C, and D.
- A TL stipulation would be applied to prohibit human encroachment within 0.5-mile of active bald eagle nests from November 15 to July 31 under Alternatives B, C, and D.

### **P.3.10 Fish**

The external recommendation identified concerns for ESA-listed fish species in the north-central portion of the proposed MLP area. In particular, recent

research suggests that drainages previously thought to be occupied by Colorado River cutthroat trout may be occupied by greenback cutthroat trout and vice versa. Other potentially affected listed species include razorback sucker, humpback chub, roundtail chub, and Colorado pikeminnow.

The Draft RMP/EIS proposes several protective measures for fish species, including the following:

- A TL stipulation to prohibit in-channel stream work in all occupied trout streams during appropriate spring and fall spawning periods of April 1 to August 1 for rainbow and cutthroat trout and Paiute and mottled sculpin and October 1 to November 30 for brown and brook trout under Alternatives B and C.
- A TL stipulation to prohibit in-channel work in all occupied cutthroat trout streams during spring spawning periods of April 1 to August 1 under Alternative D.
- An NSO stipulation to prohibit surface occupancy and surface-disturbing activities within 328 feet from edge of ordinary high-water mark (bank-full stage) of streams containing conservation and core conservation populations of cutthroat trout under Alternative D.

In addition, NSO and CSU stipulations to protect water resources (see **Section P.3.2**, Soil and Water Resources), wildlife emphasis area designations (e.g., Roan and Carr Creeks), and ACEC designations (e.g., Roan and Carr Creeks) directly benefit fish species.

### **P.3.11 Special Designations & Other Areas**

When developing an MLP, IM-2010-117 directs that the effects of oil and gas leasing and development should be considered in areas such as ACECs, WSAs, lands with wilderness characteristics, and any nearby state, tribal, or other federal agency lands. **Table P-3**, Areas Emphasized in the External MLP Recommendation, shows the amount of acreage associated with these emphasis areas within the externally recommended MLP area under Alternative B.

#### **Wilderness Study Areas**

Under all alternatives the Demaree Canyon and Little Book Cliffs WSAs (52,000 acres) would remain closed to oil and gas leasing. Consistent with BLM's Interim Management Policy pending congressional action on wilderness recommendations, exceptions would be granted on a case-by-case basis for valid existing rights and grandfathered uses.

**Table P-3**  
**Areas Emphasized in the External MLP Recommendation**

<b>Emphasis Area</b>	<b>Shale Ridges and Canyons Alternative B</b>
Wilderness Study Areas	52,000
Areas of Critical Environmental Concern	53,800
Citizen Wilderness Proposals <sup>1</sup>	15,700
Colorado Natural Heritage Program PCAs <sup>2</sup>	31,400

<sup>1</sup> Acreage includes only areas outside of WSAs and within federal mineral estate.

<sup>2</sup> Acreage includes only areas outside of ACECs and within federal mineral estate.

### ***Areas of Critical Environmental Concern***

**Figure P-5** shows the proposed ACECs under Alternative B and whether they are currently leased. Under all alternatives, an NSO stipulation would be applied to all ACECs within the externally recommended MLP area. In addition to the species-specific stipulations described above, ACEC stipulations provide place-based protections for species and other sensitive resources.

Under Alternative A, Pyramid Rock and Badger Wash ACECs (2,500 acres) are protected by NSO stipulation within the externally recommended MLP boundary. Under Alternative B, ACECs include Pyramid Rock, Badger Wash, Roan and Carr Creeks, South Shale Ridge, Atwell Gulch, and Mt. Garfield (53,800 acres). Under Alternative C, this includes Pyramid Rock, Badger Wash, Roan and Carr Creeks, South Shale Ridge, Atwell Gulch, Mt. Garfield, Prairie Canyon, and Colorado River Riparian (84,800 acres). Under Alternative D, Pyramid Rock and Badger Wash ACECs (3,500 acres) are protected.

### ***CNHP Potential Conservation Areas***

The Colorado Natural Heritage Program identifies PCAs as the estimated area required to support the long-term (100 years or more) survival of targeted species or natural communities. There are 149,900 acres of PCAs within the externally recommended MLP boundary. The targeted species within most of the PCAs are rare plants, including those specifically managed for by the BLM as either BLM Sensitive species or federally listed species. Descriptions of stipulations and management actions for ACECs, special status plants, and sage-grouse are provided above.

As discussed under Soil and Water Resources, important plant and wildlife habitat, including major river corridors and areas adjacent to perennial waters and springs are all protected through the use of either a CSU or NSO stipulation.

## **P.4 THE RMP/EIS AND ANALYSIS OF THE EXTERNALLY RECOMMENDED MASTER LEASING PLAN**

### **P.4.1 Summary of Stipulations Under Alternative B**

As analyzed in the Draft RMP/EIS and summarized in this appendix, areas with important resource values (e.g., wildlife emphasis areas, ACECs, and other special designations) are often protected through the application of targeted NSO, CSU, or TL stipulations. However, stipulations are not restricted to special designation area boundaries; rather, they apply to the broader boundaries of many species' habitat and other wide-ranging geographic values.

Under Alternative B, 631,900 acres of federal mineral estate with oil and gas development potential would be open for leasing. Only 177,100 of those acres (28 percent) are currently unleased. The remaining 454,800 acres (72 percent) that are already leased would not be subject to any proposed leasing stipulations in this RMP/EIS unless a lease expires and is resold.

Within the 177,100 unleased acres with development potential, 93,900 acres (53 percent) are protected by a mapped NSO stipulation, 113,800 acres (64 percent) are protected by a mapped CSU stipulation, and 73,200 acres (41 percent) are protected by a mapped TL stipulation. Unmapped stipulations (e.g., those for special status species) may apply to additional acres. As shown in this appendix and in Chapter 4, these stipulations would protect the resources identified in the external MLP recommendation in a manner consistent with an MLP.

### **P.4.2 Conclusion**

Per IM 2010-117, the preparation of an MLP is required when all four of the following criteria are met:

- A substantial portion of the area to be analyzed in the MLP is not currently leased.
- There is a majority Federal mineral interest.
- The oil and gas industry has expressed a specific interest in leasing, and there is a moderate or high potential for oil and gas confirmed by the discovery of oil and gas in the general area.
- Additional analysis or information is needed to address likely resource or cumulative impacts if oil and gas development were to occur where there are:
  - multiple-use or natural/cultural resource conflicts;
  - impacts to air quality;
  - impacts on the resources or values of any unit of the National Park System, national wildlife refuge, or National Forest

- wilderness area, as determined after consultation or coordination with the NPS, the USFWS, or the USFS; or
- impacts on other specially designated areas.

As described above, the Shale Ridges and Canyons area fails to meet all of the above-listed criteria. Therefore, preparation of an MLP is not required. Although not required, the GJFO has reviewed the sections of the RMP/EIS pertaining to fluid minerals leasing and determined that it is consistent with the intent of the MLP concept and addresses all of the concerns discussed in the external recommendation. The RMP/EIS is a comprehensive look at resource management, including oil and gas development, over the next 20 years and considers a range of protective measures designed to minimize conflicts between oil and gas development and resource protection. Indeed, the RMP/EIS incorporates nearly all of the examples given in IM 2010-117 of the types of decisions that may be made during preparation of an MLP. As such, the GJFO feels it is unnecessary to prepare an MLP for this area at this time.

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