

Proposed Action

In response to the purpose and need for action, the Forest Service proposes to amend the Forest Plan to provide additional guidance for the following resources: watershed and soils, big game winter range, cultural resources, noise, air quality, and five areas of resource concern. In addition, new standards and guidelines for existing and new leases related to timing of operations, surface occupancy, and management of surface use and operations would be provided. On existing leases these guidelines would be applied, as applicable, through Conditions of Approval of the Surface Use Plan of Operations. For new leases these guidelines would be applied through stipulations attached to the new lease and through Conditions of Approval. The Proposed Action would encourage the use of unconventional drilling techniques, such as directional drilling, co-location, and twining, to reduce the impact to surface resources. The Proposed Action would recognize Bancos, La Jara, Valencia, Fierro Canyon and Mesa as Areas of Resource Concern. In these areas the feasibility of unconventional drilling techniques would be required as part of the common plan of development. The feasibility for such requirements would consider horizontal distance, well bore trajectory, economics, reservoir and rock properties.

The Carson Forest Plan would be amended specifically for the entire Jicarilla Ranger District for:

BIG GAME WINTER RANGE :

- Considering the present development and density of open roads within Elk Big Game Winter Range on the District. Open road density in Elk Big Game Winter Range habitat would be increased from 1.0 miles/miles² to 1.1 miles/miles² of roads.
- Considering the present development and density of open roads within Elk Big Game Winter Range on the District. Open road density in Deer Big Game Winter Range would be increased from 0.5 miles/miles² to 0.6 mi/ mi².
- All new roads over 300 feet would be gated, if ground conditions make it feasible.
- Open road density would be reduced as much as possible in these areas by gating, reclaiming roads no longer needed.
- New open road density in these areas would be minimized to the extent possible while allowing access.

The Carson Forest Plan would be amended specifically for fluid mineral development on the Jicarilla Ranger District in the following areas:

EXISTING LEASES

The following standards and guidelines, in cooperation with existing leaseholders, would be applied through Conditions of Approval (COA) associated with the Surface Use Operations Plan. Standard lease terms on existing leases allow the surface managing agency to move new locations for well pads, roads or pipelines up to 200 meters and can restrict start-up timing up to 60 days. Further mitigations identified at the Application for Permit to Drill stage can be required.

General

- Reduce direct surface impacts through well siting measures that consolidate and co-locate facilities, where feasible, to reduce surface well density. Encourage use of existing well pads, roads, and pipeline corridors.

District-wide Conditions of Approval

- Presently, oil and gas operators on the Jicarilla Ranger District are voluntarily abiding by a District policy to restrict any new drilling activity between November 1 and March 31. This policy would become a standard COA for the purposes of protecting a variety of surface resources across the Jicarilla Ranger District.

Exceptions to this timing restriction may occur on an occasional case-by-case basis. Prior to granting exceptions consideration would include; big game animal location, snow depth, climatic conditions, road conditions, duration and extent of request, amount and type of equipment, whether the work could be completed around wet weather conditions, and the amount and type of other activity occurring on the District. Normal re-occurring production and day to day operations, such as, swabbing, clean outs, and replacing production equipment would continue to occur year round.

Water Quality/Soils

- Exclude well pad construction in riparian areas to minimize negative impacts to riparian values on the Jicarilla Ranger District.
- Avoid well pad construction, when possible, on slopes greater than 20% with cuts over 15 feet except when other resource needs indicate.
- Minimize new road crossings slopes greater than 40%.
- Ensure maximum grades of 8% for new roads, unless pitches are less than 300 feet (up to 10% permitted). An engineering design is required to support road construction on slopes greater than 40%.
- Gate all new roads for gas development over 300 feet in length, where gating would be effective, or except when other resources needs indicate the road should be left open.
- Locate pipelines along roads and existing corridors unless other resource needs dictate. Minimize surface disturbance by putting pipes deep enough to allow other surface uses to occur on top of these lines.
- Timely reclamation and restoration of surface disturbance associated with wells and roads not needed for production and travel must be completed to achieve 70% of the ground cover (compared to nearby undisturbed areas) with permanent native vegetation within three growing seasons. Monitoring of the success of ground cover establishment will be necessary until 70% of the ground cover is established
- Require operators to improve and maintain existing arterial collector and gated roads to meet Best Management Practices specified in the “Gold Book”¹.
- Utilize established Best Management Practices for road construction standards (drainage, surfacing, upgrading crossings).
- Encourage off-site mitigation measures to reduce overall resource impacts (i.e. silt traps, obliterate roads in other areas, etc.).
- Encourage the development and use of centralized collection points for produced water to reduce heavy vehicle traffic on system roads.

¹ Surface Operating Standards for Oil & Gas Exploration & Development; “Gold Book”.

Noise

- Construct or design new gas development facilities to comply with the current Noise Policy that was developed in cooperation with the BLM.
- Noise Sensitive Areas have been identified for seven areas within the Jicarilla Ranger District. Construct gas development structures and activities where they cannot be heard from Noise Sensitive Areas, such as, designated recreation sites, administrative sites, and specified wildlife areas, to maintain the current level of quality recreation experience in the Jicarilla Ranger District and to minimize noise disturbance.

Additional Noise Sensitive Areas may be established in compliance with Noise Policy.

Air Quality

- Impacts to air quality, including cumulative impacts, from all existing and proposed sources will be consistent with the applicable ambient air quality standards throughout the lifetime of activities.
- Reduce emissions from all existing and proposed activities that could contribute to the impairment of Class I air quality related values, including visibility.
- Reduce emissions from all existing and minimize emissions on proposed sources so as not to exceed Prevention of Significant Deterioration (PSD) Class I increments.
- Utilize best available control technology to reduce emissions from oil and gas operations, including non-permitted sources. Pertains to all newly developed facilities and will be strongly encouraged at existing facilities, when facilities are updated, to use the best available technology. Example: Encourage capturing fugitive emissions including the point of drilling, production, and completion of wells, and road dust.

NEW LEASING DECISIONS

Stipulations may be necessary if the authority to control the activity on the lease does not already exist under laws, regulations, or order. Stipulations have been developed for the following categories (1) Timing or Seasonal Restrictions, (2) No Surface Occupancy, and (3) Controlled Surface Use (Rocky Mountain Coordinating Committee, 1989). New leases, including those that are pending, currently unleased, and any existing leases that become available in the future for leasing would include but not be limited to the following stipulations. Conditions of Approval listed above for existing leases would be required for new leases.

Stipulations

Timing or Seasonal Restrictions

- No drilling or completion of operations would occur between November 1st – March 31st to protect a variety of surface resources across the Jicarilla Ranger District.
- Other timing limitations may be included in a new lease if site specific conditions dictate.

- Forest Plan standards for Mexican Spotted Owl and Goshawk surveys and nesting/fledgling requirements.

Exceptions to this timing restriction may occur on an occasional case-by-case basis.

No Surface Occupancy (NSO)

- Prohibit Surface Occupancy in Bancos, Vaqueros and Fierro canyons.
- Prohibit Surface Occupancy in Valencia Canyon beyond 300 feet from existing roads.
- Exclude well pad construction in riparian areas to minimize negative impacts to riparian values on the Jicarilla Ranger District.

Controlled Surface Use (CSU)

Water Quality/Soils

- Exclude well pad construction on slopes greater than 20% with cuts over 15 feet except when other resource needs indicate.
- Prohibit new road crossings on slopes greater than 40%.
- Visuals
- Any new leases in Vaqueros Canyon would have a controlled surface use stipulation to meet the Forest Plan visual quality objective of Retention/Partial Retention.
- Fierro Mesa – Undeveloped Characteristics
- Road construction would be minimized to retain undeveloped characteristics.

Additional Conditions of Approval for New Leases

Water Quality/Soils

- New road construction will meet Gold Book standards, including all roads will be designed and approved by a licensed engineer.
- Gate all new roads for gas development over 300 feet in length, where gating would be effective, or except when other resources needs indicate the road should be left open.
- All pipelines will be located along roads and existing corridors unless other resource needs dictate. Minimize surface disturbance by putting pipes deep enough to allow other surface uses to occur on top of these lines.
- In areas of low revegetation potential additional efforts will be required for to ensure timely reclamation and restoration efforts.
- Existing roads and new roads on the leasehold will be maintained to Gold Book standards
- Off-site mitigation measures may be required to reduce overall resource impacts (i.e. silt traps, obliterate roads in other areas, etc.)

Noise

- Construct or design new gas development facilities to comply with the current Noise Policy that was developed in cooperation with the BLM.

- Equipment options that minimize noise will be required on new leases.
- Construct gas development structures and activities where they will not be seen or heard from designated recreation sites, to maintain the current level of quality recreation experience in the Jicarilla Ranger District and to minimize visual and noise disturbance to other forest users.
- The same standards for Noise Sensitive Areas will be applied on a case-by case basis to achieve an acceptable level of noise mitigation in areas outside of the noise sensitive areas. Example: central delivery points, multiple compressors.

Air Quality

- Impacts to air quality, including cumulative impacts, from all existing and proposed sources will be consistent with the applicable ambient air quality standards throughout the lifetime of activities.
- Reduce emissions from all existing and proposed activities that could contribute to the impairment of Class I air quality related values, including visibility.
- Reduce emissions from all existing and proposed sources so as not to exceed Prevention of Significant Deterioration (PSD) Class I increments.
- Utilize best available control technology to reduce emissions from oil and gas operations, including non-permitted sources. Pertains to all newly developed facilities and will be strongly encouraged at existing facilities, when facilities are updated, to use the best available technology. Example: Encourage capturing fugitive emissions including the point of drilling, production, and completion of wells, and road dust.

AREAS OF RESOURCE CONCERN

Bancos Canyon, La Jara Canyon, Valencia Canyon, Fierro Mesa & Canyon, and Vaqueros Canyon would be recognized as Areas of Resource Concern. The objective of these Areas of Resource Concern is to protect, maintain and enhance the resource values for which the area was identified to the extent possible under existing lease rights. The management of these areas may be altered or restricted in order to protect the surface resources values for which the area was designated. Table 1 lists the proposed values for which priority management will be given for each area.

Table 1-Proposed Values

<u>Specially Designate Area</u>	<u>Primary Value</u>	<u>Secondary Value</u>
Bancos Canyon	Cultural Resources	Seclusion & Watershed
Vaqueros Canyon	Visuals	Wildlife Habitat
La Jara Canyon Valencia Canyon Fierro Canyon & Mesa	Undeveloped characteristics (La Jara, Valencia, Fierro) Cultural Resources (La Jara & Valencia only)	Wildlife Security & Seclusion

Bancos Canyon, La Jara Canyon, Valencia Canyon, and Fierro Canyon & Mesa

To protect cultural sites, wildlife values and the undeveloped characteristics:

Require existing leaseholders to complete a reasonable long term plan of development prior to developing any new well sites within the area that includes (1) long term transportation and well site plan, (2) storm water prevention plan, and, (3) alternative drilling analysis that considers directional and other unconventional development scenarios to meet the objectives of the area of concern.

Any new leases the following stipulations would apply:

- Bancos, La Jara, and Fierro Canyons - No Surface Occupancy
- Valencia Canyon – Controlled surface use in the canyon
 - Limit access to the existing access road in the bottom of the canyon
 - All well pads will need to be within 300 feet of the existing road
 - The rest of Valencia Canyon would have No Surface Occupancy
- Fierro Mesa - controlled surface use for the Mesa area
 - Need to have a common plan of development for wells and roads to still recover the gas resource

Vaqueros Canyon - U.S. Highway 64 Corridor

Manage Vaqueros Canyon - US 64 Corridor - with a Visual Quality Objective (VQO) or Scenic Integrity Level of Retention/Partial Retention. The following standards and guidelines would be applied:

- Use best management practices such as placing roads on the contour, retaining screening vegetation, revegetating disturbed lands and erosion control practices to reduce disturbance to the natural landscape.
- Employ design criteria for visual elements that adhere to the natural characteristics that dominant the landscape to the extent possible.
- Any new leases in Vaqueros Canyon would have a controlled surface use stipulation to meet the visual quality objective of Retention/Partial Retention.

In addition to the site-specific standards and guidelines for these Areas of Resource Concern's, the proposed standards and guidelines listed above under Existing Leases and New Leases section would also apply.

MITIGATION MEASURES

The Proposed Action assumes that in addition to the above stated stipulations and Conditions of Approval, existing COA's would continue to be applied to Surface Use Plan of Operations. These conditions include standard mitigation measures and best management practices, such as conducting cultural resource surveys prior to a site-specific NEPA decision on ground-disturbing undertakings, avoiding cultural resources, mitigating adverse impacts prior to construction, stabilizing disturbed sites, and maintaining roads.