

Minerals Suitability Classification Process

Operational Draft: This document is prepared to provide guidance to forest plan revision teams. As this guidance is implemented we expect to learn improved ways to do this work. As we learn, this document will be updated. This document was reviewed and revised as appropriate in October 2009 to conform with the requirements of the 1982 Planning Rule Provisions.

Purpose

This document describes the process to be used consistently throughout Region 3 for identifying the suitability of areas for mineral activities in the revision process for land and resource management plans.

Background

Unlike other resources, the minerals resources are exempt from the Multiple Use-Sustained Yield Act of 1960 (16 U.S.C. 528) as minerals are non-renewable resources and have a different emphasis than other resources covered by the Act. Specifically, the Act states that “Nothing herein shall be construed so as to affect the use or lands or administration of the minerals resources of National Forest lands”.

The Minerals Policy of the Forest Service was adopted from the Mining and Minerals Policy Act of 1970 (30 U.S.C. 21a). The Forest Service program policy is to:

- Encourage and facilitate the orderly exploration, development and production of mineral and energy resources on National Forest System lands to maintain a viable, healthy minerals industry.
- Ensure that exploration, development and production of mineral and energy resources are conducted in an environmentally sound manner and that these activities are integrated with the planning and management of other National Forest resources.

Under federal law, a mining claim confers the right to access the claimed mineral. Where there is a legal right to mine or extract minerals, the decision is not whether to allow the activity but instead what are the reasonable requirements and conditions needed to minimize surface impacts from the activity.

The plan’s desired conditions are important in determining surface management requirements, but may not preclude mining where rights exist. In minerals management, the class of minerals and the land status are both factors in determining how much discretion the Forest Service has to allow or deny a type of mineral use. To facilitate determining the mineral resource class and the land status, a glossary of terms is included in Appendix A.

Minerals Suitability

Suitability for minerals uses, just as for other resource uses, can be addressed in forest planning. Several factors can be recognized in planning to the extent that minerals activities are reasonably foreseen:

- Active Mines;

- The probable occurrence of various minerals, including locatable, leasable and common variety (saleable) minerals;
- The potential for future mineral development and potential need for withdrawal of specific areas from mineral development;
- Access requirements for mineral exploration and development, and
- The probable effect of renewable resource prescriptions and management direction *on* mineral resources and activities, including exploration and development.

In many cases, types of mineral activities, or non-activity, are based on existing legal mineral rights or legal prohibitions rather than management prescriptions. For example mineral activities may take place on a mining claim or lease, because of legal rights. The suitability for these two mineral activities is already decided by either the mining laws, or the existence of a lease. Similarly, suitability for mineral activities is already decided in the case of a mineral withdrawal. In all these cases it is not meaningful to identify as either suitable or unsuitable, because a suitability decision has already been made for minerals. In other words, the suitability terminology used in forest planning is not appropriate where suitability is pre-determined. In the case of pre-existing rights, the desired condition is important in determining surface management conditions (including concurrent and final reclamation requirements) but may not preclude mining. Only where the decision to mine and extract minerals is discretionary does the desired condition play a role in the actual decision to allow the mining activity.

Discretion to allow use is more complex for national resources such as energy leasable minerals. For oil, gas and geothermal leasing, the regulations require that decisions regarding the availability (and therefore suitability) of lands for leasing require a leasing analysis as set forth in 36 CFR 228.102. Court decisions have affirmed that leasing availability decisions must be made with full NEPA disclosure.

Summary

Therefore, suitability for minerals activities is, in some cases, already legally determined or may only be fully determined through an area-specific NEPA process. The interplay of several factors determines whether the minerals activity is discretionary or non-discretionary on the part of the Forest Service. It is essential to know the class of mineral resource and the land status of the area in order to identify whether a legal right to the mineral resource may already exist. Where the Forest Service has discretion to allow or disallow a mineral resource activity, suitability for mineral resources is tied to current economic, social and ecologic factors.

Minerals Suitability Determination Process

Locatable minerals: All public domain lands are available for locatable mineral entry under the 1872 Mining Law (as amended), unless the lands are withdrawn from mineral entry (and in such case they are not available for mineral activities.) Accordingly, and as shown in Table 1, locatable minerals do not appropriately fit into categories of suitable or unsuitable. Unless the lands are withdrawn, identify all reserved public domain National Forest lands as “not appropriate for suitability classifications” for locatable minerals, as these lands are determined to be *open* to mineral location under the mining law.

Where lands are withdrawn, identify all reserved public domain National Forest lands as “not appropriate for suitability classifications” because these lands are already determined to be **closed** to location under the mining laws.

Leaseable Minerals: National Forest lands that are already leased for minerals, and lands withdrawn from leasing, do not appropriately fit into categories of suitable or unsuitable, as a suitability decision has already been made at the time of leasing or withdrawal. Identify these lands as “not appropriate for suitability classifications”. (Refer to Table 1.) If neither leased nor withdrawn, an oil and gas leasing analysis is required to make a full determination of suitability for these resources.” Where a leasing analysis has been completed according to 36 CFR 228.102 c., parts i, ii, iii; identify areas found ‘open’, as suitable, or ‘closed’ as unsuitable. Areas where no leasing analysis has been completed, and where leasing is compatible with Desired Conditions should be identified as suitable. Areas where no leasing analysis has been completed, and where leasing is *not* compatible with Desired Conditions should be identified as not suitable. The majority of National Forest System Lands in Region 3 do not have potential for oil and gas. Where a mineral resource assessment has determined “no potential” for oil and gas, areas may be identified as not suitable until/unless there is a further leasing analysis or assessment identifying otherwise. This meets the requirements of law, regulation and policy.

Salable/Mineral Materials/Common Variety Minerals: Unless it is specifically prohibited by law or formal administrative withdrawal, the suitability of areas for these types of minerals is determined by desired conditions (Table 1.). When salable/mineral materials/common variety minerals activities are consistent with desired conditions, identify National Forest lands covered by those desired conditions as suitable. Where inconsistent with desired conditions, identify National Forest lands as unsuitable for salable/mineral materials/common variety minerals.

Outstanding or Reserved mineral rights: All National Forest lands where mineral rights are reserved or outstanding are not appropriate for either a suitability or “general non-suitability determination, as in Table 1.

Table 1. Summary of Minerals Suitability

| Mineral Type | Not Appropriate for Suitability classifications | Suitable | Not Suitable |
|---|---|----------|--------------|
| Locatable Minerals | X | | |
| Outstanding/Reserved | X | | |
| Withdrawals | X | | |
| Leasable Minerals | | | |
| Areas withdrawn from leasing | X | | |
| Areas identified in leasing analysis as administratively ‘closed’ to leasing | | | X |
| Areas of existing leases | X | | |
| Areas identified in leasing analysis as ‘open’ to leasing. | | X | |
| Areas not withdrawn, that contain no existing leases, and where no leasing analysis has been completed and where leasing <i>is</i> compatible with Desired Conditions | | X | |

| Mineral Type | Not Appropriate for Suitability classifications | Suitable | Not Suitable |
|---|---|----------|--------------|
| Areas not withdrawn, that contain no existing leases, and where no leasing analysis has been completed and where leasing <i>is not</i> compatible with Desired Conditions | | | X |
| Areas where a mineral resource assessment has determined ‘no potential’ for oil and gas | | | X |
| Salable/Mineral Materials (Common Variety) | | | |
| Areas where Salable Mineral removal is Prohibited by Law | X | | |
| Areas not withdrawn, and compatible with Desired Conditions | | X | |
| Areas not withdrawn, but not compatible with Desired Conditions | | | X |

Appendix A: Glossary of Terms

Class of mineral resource: There are three types of minerals classification established by law and regulation:

- a. *Locatable minerals*, which are in general, the hardrock minerals mined and processed for metals (for example: gold, silver, copper, uranium and some types of non-metallic minerals). They are called ‘locatable’, meaning subject to mining claim location under the United States mining laws. Locatable minerals are limited to lands with “reserved public domain” status.
- b. *Leasable minerals*, which are defined in several acts. Leasable minerals include coal, oil, gas, oil shale, sodium, phosphate, potassium, geothermal and, in New Mexico, sulfur. Leaseable minerals also include the hardrock minerals, if they are found on lands that have “acquired” status. Leases are obtained through the Bureau of Land Management to extract these mineral resources.
- c. *Salable/Mineral Materials/Common Variety Minerals*, are synonymous terms for the same class of minerals that can be sold under a mineral material contract, and are common. These minerals are relatively low value per volume, for example: sand, gravel, cinders, common building stone, and flagstone. Many of the materials are used for road surfacing, boulders, and engineering construction or may be specialty resources such as soil amendments or decorative stone, including flagstone. These minerals are typically sold unless used internally, by another government agency, or for ceremonial uses. In these cases they may be provided free of charge.

If you are unsure whether you have a locatable, leasable or saleable mineral, check with your forest geologist or a certified mineral examiner.

Land status classification: There are four types of Forest Service Land Status that may affect mineral administration and determine under which laws the minerals will be administered.

- a. *Reserved public domain.* These Forest System lands have always been in public ownership (public domain) and were set aside as Forest Reserves (later the National

- Forest System). This is the most common type of land classification on the national forests.
- b. *Acquired*. These lands were once in private ownership and at a later date, the United States acquired the land. The United States may or may not have acquired the mineral rights. Hardrock minerals, which would be administered as locatable minerals on reserved public domain land, are administered as leasable minerals on acquired lands. When mineral operations are proposed on acquired lands, the conveyance deed should be reviewed to ensure the ownership of the mineral rights is known.
 - c. *Withdrawn*. These lands have been withdrawn from certain mineral laws in order to protect other resources or major investments. Each withdrawal specifies what type of mineral entry is prohibited. For example, withdrawals are usually from mineral entry under the 1872 Mining Law- as amended- but may include other forms of mineral entry, including the mineral leasing laws. Mineral rights in existence before the withdrawal date can remain in effect, such as pre-existing mining claims (that are deemed valid), or existing leases.
 - d. *Reserved or Outstanding Mineral Rights*. The mineral rights to these lands are not owned by the federal government.
 - Outstanding minerals are those mineral rights that were owned by third parties when the United States acquired the land. The language in the deed determines just what the outstanding mineral rights are.
 - Reserved minerals are any mineral rights retained by another party at the time of acquisition of the surface by the United States. Reserved minerals are made subject to the Secretary of Agriculture's Rules and Regulations for mineral reservations and are made a part of the deed. The holder of mineral rights has a right of access to such mineral resource as is described in the deed.

Appendix B, GIS Needs

Produce suitability maps based on above determinations.

Scale of GIS needs: Forest-wide maps and smaller scale maps of specific areas as appropriate to special identification in a Forest Plan.

GIS Needs for analysis and administration: A need for the following types of maps could be anticipated:

- Maps showing areas withdrawn from mineral entry i.e., wilderness, administrative sites) and a reference to the specific withdrawal.
- Maps showing locations of outstanding or reserved rights.
- Maps showing current and past mining locations
- Composite maps made from geologic maps and other specialty maps and aerial photo images (for example: hydrology, mining claims, geologic hazards, etc.) which would be potentially available from the USGS, BLM, industry, and private sources. For the most part, these types of maps are expected to be produced at larger scale for specific areas or projects.
- Composite maps showing areas of potential conflicts/concerns/opportunities regarding other resource values. Many of these map layers would already be available from other resource staff units.
- Transportation layer.