

Chapter 7. Suitability



Commercial timber sale operation

Introduction

The National Forest Management Act (NFMA) states that national forest plans shall provide for multiple use and sustained yield of products and services through management of renewable surface resources to best meet the needs of the American people. NFMA also requires that NFS lands be classified as to their suitability for various uses including timber production, forage production for grazing animals, and recreation opportunities.

In the context of the plan, suitability refers to the appropriateness of applying certain resource management practices to a particular area of land, in consideration of the relevant social, economic, and ecological factors. Suitability determinations are one of the decisions made as part of revising the plan.

Suitability is determined based on compatibility with desired conditions and objectives in the plan area. Lands within the plan area are not identified as suitable for a certain use if that use is prohibited by law, regulation, or policy; would result in substantial and permanent impairment of the productivity of the land or renewable resources; or if the use is incompatible with the desired conditions for the relevant portion of the plan area.

The suitability determinations (plan decisions) are summarized below and displayed in tables 6, 7, and 8. The information outside of these tables are not plan decisions but are provided for background.

Suitability Determinations for Timber, Grazing, and Recreation

Suit-Timber-1	The amount of land suitable for timber production is 38,875 acres.
Suit-Grazing-1	The amount of land suitable for grazing animals is 913,078 acres.
Suit-Rec-1	The suitability of areas for recreation use varies by the activity and setting, as shown in the recreation suitability matrix.

Timber Suitability

The Forest Service Manual (FSM 1900) defines timber production as, “the purposeful growing, tending, harvesting, and regeneration of regulated crops of trees for cutting into logs, bolts, or other round sections for industrial or consumer use.” For purposes of forest planning, timber production does not include firewood or harvests from unsuitable lands. FSM 1900 defines forest land as land which is at least 10 percent occupied by forest trees or formerly having had such tree cover and not currently developed for nonforest use. Lands developed for nonforest use include areas for crops, improved pasture, residential or administrative areas, improved roads of any width, and adjoining road clearing and power line clearing of any width.

Unsuitable forest land is forest land not managed for timber production because: (a) Congress, the Secretary of the Department of Agriculture, or the Chief of the Forest Service has withdrawn it; (b) it is not producing or capable of producing crops of industrial wood; (c) technology is not available to prevent irreversible damage to soils productivity or watershed conditions; (d) there is no reasonable assurance based on existing technology and knowledge that it is possible to restock lands within 5 years after final harvest, as reflected in current research and experience; (e) there is, at present, a lack of adequate information about ecological responses to timber management activities; or (f) timber management is inconsistent with or not cost efficient in meeting the management requirements and multiple-use objectives specified in the plan. Table 6 displays the amount of lands suitable for timber production on the Prescott NF. For additional information, see the “Timber Suitability, Long-Term Sustained Yield Capacity, and Allowable Sale Quantity Report” (Forest Service, 2011b).

Table 6. Timber suitability on the Prescott NF (in acres)

Total NFS Lands	1,255,804
Nonforest lands	-1,182,829
Lands withdrawn from timber production	-12,136
Lands where irreversible resource damage likely	0

Total NFS Lands	1,255,804
Lands where adequate restocking not assured	0
Total lands tentatively suitable for timber production	60,839
Lands where management area prescriptions preclude timber production	-25
Lands where management objectives limit timber harvest	-16,426
Lands that are not economically cost efficient	-5,513
Total lands not appropriate for timber production	21,964
Total lands suitable for timber production	38,875
Total lands not suitable for timber production	1,216,929

Range Suitability

The capability of the land to produce forage for grazing animals depends primarily upon site conditions such as climate, slope, landform, soils, and geology. The capability of the lands on the Prescott NF to produce forage for grazing animals was determined in the 1980s during the first round of forest planning. Most landscape-scale conditions that determine capability have not changed significantly since the first evaluation.

Table 7. Grazing capability on the Prescott NF (in acres)

Total NFS Lands	1,267,515
Lands generally not capable for livestock grazing	
Forage productivity less than 100 lbs. per acre per year	127,508
Soils that are Inherently Unstable ¹	114,786
Steep slopes greater than 60 percent	15,400
Total lands generally not capable for livestock grazing	257,694
Lands generally capable for livestock grazing (total – not capable)	1,009,821²

¹ This classification is displayed in TES under Landscape features and is an interpretation based on climate, soils, rock features, and slopes. It indicates conditions where annual soil renewability is less than soil loss under natural conditions described in Potential Plant Community in the TES document. Therefore, retention of vegetative cover may not slow erosion or soil creep processes even with management intervention, such as seeding.

² This area is about 4 percent less than the pre-GIS calculation in the 1983 Analysis of the Management Situation due to increased accuracy in the mapping.

Suitability is determined based on compatibility with desired conditions and objectives in the plan area. Lands within the plan area are not identified as suitable for a certain use if that use is prohibited by law, regulation, or policy; would result in substantial and permanent impairment of the productivity of the land or renewable resources; or if the use is incompatible with the desired conditions for the relevant portion of the plan area.

An identification of an area as suitable for a particular use does not mean that the use will occur over the entire area. Likewise, identifying that a particular use is not suitable in a management area does not mean that the use will not occur in specific areas. The identification of an area as suitable for various uses is guidance for project and activity decisionmaking and is not a resource commitment or final decision approving projects and activities. Final decisions on resource commitments are made at the project level. The final decision to authorize livestock grazing would be made at a project (allotment) level.

The 1987 Forest Plan (1987 plan) identified Management Area 7 as unsuitable for livestock grazing. It consisted of three recreation areas: Lynx Lake Recreation Area, Granite Basin Recreation Area and summer home group, and the Verde Wild and Scenic River. In addition to Management Area 7, the Prescott Municipal Watershed was considered unsuitable for grazing as part of a 1924 agreement, and Lane Mountain Watershed was excluded beginning in 1975. These exclusions were carried over into the new suitability analysis.

Since the 1987 plan was completed, site-specific grazing allotment analyses and decisions have resulted in exclusion of grazing within certain areas of the Prescott NF. Table 8 displays the acreage of these large exclusions that have been included in the grazing suitability calculation. For additional information, see the “Determination of Livestock Grazing Capability and Suitability Report” (Forest Service, 2015).

Figure 5 displays areas excluded from grazing since 1987, areas excluded as part of Management Area 7, and areas excluded as part of the Prescott Municipal Watershed in the 1987 plan. The remainder of the Prescott NF displayed is suitable for grazing. Note that exclusions at the allotment or pasture level are not shown due to the scale of the map.

Table 8. Grazing suitability on the Prescott NF (in acres)

Lands generally capable for livestock grazing		1, 009,821
Lands generally not suitable for livestock grazing		
1987 Forest Plan Management Area 7		4,547
<u>1987 Forest Plan Excluded Watersheds</u>		<u>35,141</u>
Lands generally not suitable for livestock grazing in the 1987 Forest Plan		- 39,688
Allotments where a portion of acreage was excluded since the 1987 plan was approved	Crown King	-15,380
	Big Bug	-1,215
	Maverick	-13,000
	Crooks Canyon	-8,700
	Brady	-1,920
	Cold Springs	-10,806
	Burnt Ranch	-4,048
	<u>Goat Peak</u>	<u>-1,986</u>
Total allotment exclusions		-57,055
Lands generally suitable for livestock grazing in the 2015 Forest Plan (1987 suitable acres – allotment specific exclusions)		913,078

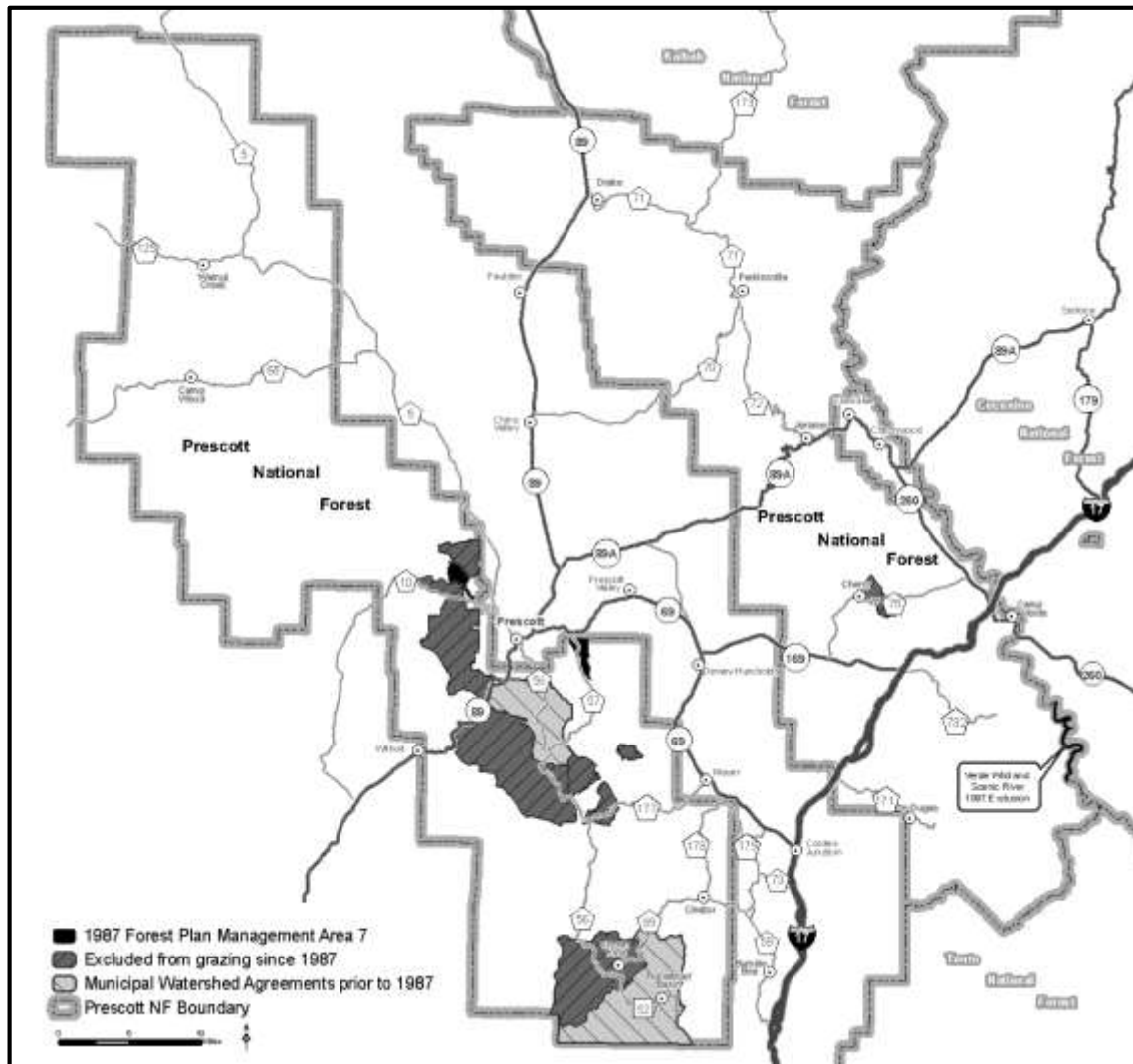


Figure 5. Large area grazing exclusions

Recreation Suitability

A broad spectrum of outdoor recreation opportunities are provided on the Prescott NF. Opportunities provided are to be consistent with needs and demands for all major resources.

An area or setting is deemed suitable if it is appropriate for the activity, regardless of whether the opportunity exists. This does not mean that the activity will occur over the entire area. National Forest System lands are generally suitable for a variety of uses, including recreation, unless restricted by presidential, congressional, or administrative constraints.

A setting is not suitable if it is not appropriate for the activity or the activity is not allowed by law, regulation, or policy within the area. Areas that are permitted for other resource use, such as communication sites, electric substations, mining operations, or energy development, are not suitable for recreation; these settings are also not listed in the suitability matrix. The following setting definitions are provided for clarity:

Administrative Facilities – buildings and areas where the primary purpose is to support Forest Service functions and administration. Examples include forest supervisor and ranger district offices, work centers, and aviation facilities.

Designated OHV Area – an area set aside for motorized cross-country travel as identified in the “Prescott National Forest Motor Vehicle Use Map.”

Developed Recreation Facilities – buildings or structures designed to enhance the visitor’s recreation experience and provide a greater level of convenience at the site. These include campgrounds and picnic areas with designated sites, day use areas with toilet facilities, designated shooting ranges, and developed trailheads.

Motorized Forest System Trails – trails that have been identified on the “Prescott National Forest Motor Vehicle Use Map” as open for motorized use.

Nonmotorized Forest System Trails – trails that are constructed or maintained by the Forest Service and which are open for travel by foot, horse, or bicycle.

Heritage Interpretive Area – an area with unique opportunities to expand cultural or historic knowledge.

Wild and Scenic River – a congressionally designated river or river segment that meets at least one of three classifications: wild, scenic, or recreation. These classifications are dependent upon access, shoreline development, and flow restrictions.

Wilderness – refers to existing designated wilderness areas.

Table 9 indicates suitability of various recreation activities within the various identified settings.

Table 9. Recreation Suitability Matrix

		Activities						
		Developed Recreation	Dispersed Camping	Nonmotorized Dispersed Recreation	Motorized Recreation	Water-based Recreation	Education / Interpretation	
		Suitable – the area or site is appropriate for the activity, whether the opportunity is available or not. Not Suitable – the area or site is not appropriate for the activity or the activity is not allowed by law or regulation within the area.	Activities that are dependent upon facilities provided by the Forest Service. Examples include developed camping, picnicking, or group gatherings.	Camping outside of a developed campground, including designated dispersed camping, dispersed car camping, and back-country camping.	Activities which are not dependent upon developed facilities or motorized equipment, including hiking, backpacking, hunting, wildlife viewing, rock climbing, equestrian use, or mountain biking.	The operation of motorized vehicles such as all-terrain vehicles, off-highway vehicles, or motorcycles for recreation as opposed to transportation.	On water and water adjacent activities such as rafting, tubing, kayaking, boating, swimming, wading, and fishing. Includes both motorized and nonmotorized use.	Recreation based on the pursuit of knowledge and understanding. Ranges from formal displays and programs to outdoor classrooms, interpretive field trips, and citizen scientist projects.
Settings	Developed Recreation Facilities	Suitable	Not Suitable	Not Suitable	Not Suitable	Suitable	Suitable	
	Heritage Interpretive Area	Suitable	Not Suitable	Suitable	Not Suitable	Not Suitable	Suitable	
	Wilderness ¹	Not Suitable	Suitable	Suitable for nonmechanized only	Not Suitable	Suitable	Suitable	
	Wild and Scenic River	Suitable ²	Suitable	Suitable	Not Suitable	Suitable	Suitable	
	Grapevine Botanical Area	Not Suitable	Not Suitable	Suitable	Not Suitable	Suitable	Suitable	
	Nonmotorized Forest System Trails	Not Suitable	Suitable	Suitable	Not Suitable	Not Suitable	Suitable	
	Motorized Forest System Trails	Not Suitable	Suitable	Suitable where allowed	Suitable	Not Suitable	Suitable	
	Designated OHV Area	Suitable	Not Suitable	Not Suitable	Suitable	Not Suitable	Suitable	
	Administrative Facilities	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Suitable	

¹ Recreation suitability in recommended wilderness is at the discretion of the forest supervisor.² Developed recreation activities are suitable in river segment corridors classified as “recreational.”