

## CHAPTER 6

## GLOSSARY

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### ACRONYMS

AA - analysis area	CMAI - culmination of mean annual increment
ACP - Agriculture Conservation Program	CO - the molecule carbon monoxide
AD - Administratively Determined	CUA - concentrated use area
ADA - Americans with Disabilities Act	CVHW - cove hardwood.
AMSL - above mean sea level	CWA - Clean Water Act
AMS - Analysis of the Management Situation	CWD - coarse woody debris
APHIS - Animal and Plant Health Inspection Service	DBH - diameter at breast height
AQRV - Air Quality Related Value	DEIS - Draft Environmental Impact Statement
ASQ - allowable sale quantity	DEM - Digital Elevation Model
AT - Appalachian Trail	DFC - desired future condition
ATSA - Automated Timber Sale Accounting System	EA - environmental assessment
ATV - all-terrain vehicle	ECOMAP - Ecological Classification and Mapping Task Team
AUM - animal unit month	ECS - Ecological Classification System
BA - basal area	EIS - Environmental Impact Statement
BF - board foot	EPA - United States Environmental Protection Agency
BIO - biological oxygen demand	EPD - Georgia Environmental Protection Division
BMP - best management practice	EWPP - Emergency Watershed Protection Plan
BSS - base sale schedule	FDR - forest development road
CAA - Clean Air Act (federal)	FEIS - Final Environmental Impact Statement
CCF - hundred cubic feet	FH - forest highway
CEQ - Council on Environmental Quality	FIA - forest inventory and analysis
CF - cubic foot	FMAP - Fire Management Action Plan
CFL - commercial forest land	FR - forest road
CFR - Code of Federal Regulations	
CFS - cubic feet per second	
CIP - Capital Investment Program	
CISC - continuous inventory of stand conditions	

FRP - forest road program	M&E – monitoring and evaluation
FS – USDA Forest Service	MA - management area
FSH - Forest Service Handbook	MAR - Management Attainment Report
FSM - Forest Service Manual	MAUM - thousand animal unit month
FTE - full-time employee	MBF - thousand board feet
FVS – Forest Vegetation Simulator	MCF - thousand cubic feet
FWRBE (Team) – Fish, Wildlife, Range, Botany, and Ecology	MIL - management intensity level
FY - fiscal year	MIS - management indicator species
GAO - Government Accounting Office	MIST – minimum impact suppression techniques
GEPD – Georgia Environmental Protection Division	MM - million
GFA – general forest area	MM\$ - millions of dollars
GIS - Geographic Information System	MMBF - million board feet
GPD - gross domestic product	MMCF - million cubic feet
	MMR - minimum management requirement
ha – hectare	MMRVD - million recreation visitor-days
HMA – habitat management area	MOU - memorandum of understanding
HRP - Human Resource Program	MRVD - thousand recreation visitor-days
HU – Hydrologic Units	MWFUD - thousand wildlife and fish user-day
HUC – Hydrologic Unit Codes	
IDT - Interdisciplinary Team	N – The element nitrogen
IPM - integrated pest management	NAAQS - National Ambient Air Quality Standards
IS - Interpretive Services	NAPAP – National Acid Precipitation Assessment Program
	NEPA - National Environmental Policy Act
KCfast - Kansas City fire access software	NF - National Forest
	NFMA - National Forest Management Act
LAC – limits of acceptable change	NFRS – National Forest Recreation Survey
LAR - Land Area Report	NFS – National Forest System
LE - law enforcement	NFSR – National Forest System Road
LOAP - Landownership Adjustment Plan	NLFCA – National Listing of Fish Consumption Advisories
LP – linear programming	Nox – Nitrogen oxides
LRMP – Land and Resource Management Plan	NO3 – The anion nitrate
LTA - landtype association	NPL – National Priorities List
LTP - landtype phase	NPS – National Park Service
LTSYC - long-term sustained-yield capacity	NRCS - Natural Resources Conservation Service
LUG - land-use group	NRI – Natural Resource Inventory
L&WCF - Land and Water Conservation Fund	NSO – no surface occupancy (mineral stipulation)
LWD – large woody debris	NTMB - neotropical migratory birds
	NVUM – National Visitor Use Monitoring
M - thousand	
M\$ - thousands of dollars	

NWPS - National Wilderness Preservation System	RN2 - roaded natural 2
OHV - off-highway vehicle	ROD - Record of Decision
OMP - operation maintenance and protection	ROS - Recreation Opportunity Spectrum
ORV - Outstandingly Remarkable Values as used to characterize streams under the National Wild and Scenic Rivers Act. Also, off-road vehicle.	ROW - right-of-way
OUDES - overnight use developed sites	RPA - Resources Planning Act
PAOT - persons-at-one-time	RVD - recreation visitor-day
PETS - proposed, endangered, threatened, or sensitive (species)	S - The element sulfur
PILT - payment in lieu of taxes	SAA - Southern Appalachian Assessment
PNWR - Piedmont National Wildlife Refuge	SARRWAG - Southern Appalachian Recreation, Rivers, Wilderness Advisory Group (FS IDT)
PL - public law	SCORP - State Comprehensive Outdoor Recreation Plan
PM - particulate matter	S&G - standard and guideline
PNV - present net value	SH - state highway
PNW - present net worth	SIO - Scenic Integrity Objective
PRODCL - productivity class	SIP - State Implementation Plan
PSD - prevention of significant deterioration	SMS - Scenery Management System
PSI - pounds per square inch	SMZ - streamside management zone
R8 - USDA Forest Service, Region 8	SOX - Sulfur oxides
RAP - Roads Analysis Process or Procedure	SO4 - The anion sulfate
RARE - Roadless Area Review and Evaluation	SPB - southern pine beetle
RARE II - the second Roadless Area. Review and Evaluation	SPMO - semiprimitive motorized
RBP - Rapid Bio-assessment Protocol	SPNM - semiprimitive non-motorized
RCW - red-cockaded woodpecker	STARS - Sales Tracking and Reporting System
RCW EIS - Final Environmental Impact Statement for the management of the Red-cockaded Woodpecker and its habitat on National Forests in the Southern Region	SUDS - Special Uses Data System
RD - Ranger District	T&E - threatened and endangered
RIM - recreation information management	TES - threatened and endangered species
RMO - road management objectives	TNC - The Nature Conservancy
RNA - research natural area	TSI - timber stand improvement
RN1 - roaded natural 1	TSPIRS - Timber Sale Program Information Reporting System
	TVA - Tennessee Valley Authority
	UPLD - upland hardwood/mixed
	USC - United States Code
	USDA - U.S. Department of Agriculture
	USDI - U.S. Department of Interior
	USFWS - U.S. Fish and Wildlife Service
	USGS - U.S. Geological Survey
	UV - ultraviolet
	VIS - Visitor Information Services
	VMS - Visual Management System

VOCs – volatile organic compounds

VQO - visual quality objective

WCR – Watershed Condition Rank

WHI - wildlife habitat improvement

WIN - Watershed Improvement Inventory

WO - Washington Office

WPIN - white pine

WRD - Wildlife Resources Division

WRP – Wetlands Reserve Program

WSA - wilderness study area

WSMA – watershed management area

WURR – water use rights and  
requirements

YPIN - yellow pine

## SOURCES

Definitions were taken from the following sources:

ArcGIS Version 8.1 Internal Glossary, ©1999-2001

Chang, Kang-tsung. 2004. *Introduction to Geographic Information Systems*, Second Edition. McGraw-Hill. New York, NY. 400 pages.

Code of Federal Regulations (CFR) Title 36, *Parks, Forests, and Public Property*, Chapter II, Forest Service, Department of Agriculture; Part 219, Planning, Section A, National Forest System Land and Resource Management Planning; Section 219.3, Definitions and Terminology, Revised July 1, 1998.

ECOMAP. 1993. National hierarchical framework of ecological units. Unpublished administrative paper. Washington, D.C.: U.S. Department of Agriculture, Forest Service. 20 p.

Forest IDT is the Interdisciplinary Team on the Chattahoochee-Oconee NFs.

Forest Inventory and Analysis Unit. *A User's Guide to Forest Information Retrieval (FIR)*, Southeastern Forest Experiment Station, Asheville, NC, 1988.

Forest Service Handbook (FSH) 2090.11, *Ecological Classification and Inventory Handbook*, WO Amendment 2090.11-91-1, Effective 4/26/91, 05 - Definitions.

FSH 2409.13, *Timber Resource Planning Handbook*, WO Amendment 2409.13-92-1, Effective 8/3/92, 05 - Definitions.

FSH 2409.15, *Timber Sale Administration Handbook*, Amendment No. 2409.15-96-2, Effective Sept. 19, 1996, 05 - Definitions.

FSH 2409.17, *Silvicultural Practices Handbook*, 1/85 WO, Chapter 9 - Timber Stocking Guides and Growth Predictions, 9.05 - Definitions.

FSH 2609.13, *Wildlife and Fisheries Program Management Handbook*, WO Amendment 2609.13-92-1, Effective 8/3/92, Chapter 70 - Analysis of Economic Efficiency of Wildlife and Fisheries Projects, 70.5 - Definitions. FSH 2709.12, *Road Rights-of-Way Grants Handbook*, 9/85 WO, Zero Code, 05 - Definitions.

Forest Service Manual (FSM) 1900 - Planning, Amendment No. 1900-91-3, Effective March 15, 1991, 1905 - Definitions. (FSM 1905)

FSM 2163, *Hazardous Waste Management*, Chapter 2163.05, Definitions.

FSM 2200, *Range Management*, WO Amendment 2200-91-1 Effective 3/1/91, Chapter 2230, Grazing and Livestock Use Permit System, 2230.5 - Definitions.

FSM 2300, *Recreation, Wilderness, and Related Resource Management*, Amendment No. 2300-91-3 Effective March 12, 1991. Chapter 2355, Off-Road Vehicle Use Management, Executive Order 116-44, as amended by Executive

Order 11989, Use of Off-Road Vehicles on the Public Lands 37 FR 2877 (Feb. 9, 1972), 42 FR 26959 (May 25, 1977).

FSM 2300, *Recreation, Wilderness, and Related Resource Management*, WO AFSM 2300 - Recreation, Wilderness, and Related Resource Management, WO Amendment 2300-90-1, Effective 6/1/90, Chapter 2310 - Planning and Data Management - 2312 - Recreation Information Management (RIM).

FSM 2400, Timber Management, WO Amendment 2400-96-6 Effective 9/24/96. Chapter 2435 - Salvage Sales. 2435.05, Definitions. (FSM 2435)

FSM 2500, *Watershed and Air Management*, Amendment No. 2500-94-4, Effective Dec. 20, 1994. Chapter 2520, Watershed Protection and Management. 2521 - Watershed Condition Assessment. 2521.05 - Definitions.

FSM 2500, *Watershed and Air Management*, Amendment No. 2500-94-4, Effective Dec. 20, 1994. Chapter 2520, Watershed Protection and Management.

FSM 2526 - Riparian Area Management. 2526.05 - Definitions.

FSM 2600, *Wildlife, Fish, and Sensitive Plant Habitat Management*, Amendment No. 2600-91-8 Effective Oct. 22, 1991, Chapter 2605, Definitions.

FSM 2600, *Wildlife, Fish, and Sensitive Plant Habitat Management*, WO Amendment 2600-95-7, Effective 6/23/95, Chapter 2670, Threatened, Endangered, and Sensitive Plants and Animals, 2670.5 - Definitions.

Georgia Department of National Resources. 1999. *Source Water Assessment and Protection Implementation Plan for Public Drinking Water Sources*. Environmental Protection Division, Atlanta, GA.

Georgia Forestry Commission. 1999. *Georgia's Best Management Practices for Forestry*. Macon, GA. 68p.

*Glossary of Soil Science Terms*. 2001. Soil Science Society of America. Madison, Wisconsin.

*Interim Resource Inventory Glossary*, File 1900, Washington, DC, 96 p., June 14, 1989.

Maxwell, et. al. 1995. *A hierarchical framework of aquatic ecological units in North America (nearctic zone)*. USDA Forest Service, North central Forest Experiment Station, General Technical Report NC-176, 72 p.

Seaber, P.R., Kapinos, F.P., and Knapp, G.L., 1987. Hydrologic Unit Maps: U.S. Geologic Survey Water Supply Paper 2294. 63 p.

Society of American Foresters. 1998. *The Dictionary of Forestry*. Edited by John A. Helms. 210 p.

Timber Staff is the Timber Staff on the Chattahoochee-Oconee NFs.

USDA Forest Service, *Final Environmental Impact Statement for the Chattahoochee-Oconee National Forests Land and Resource Management Plan*, Southern Region, Supervisor's Office, Gainesville, GA, 1985.

USDA Forest Service, *Final Environmental Impact Statement for the Management of the Red-cockaded Woodpecker and its Habitat on National Forests in the Southern Region*, Southern Region, Regional Office, Atlanta, GA, 1995.

USDA Forest Service, Agriculture Handbook Number 701 – *Landscape Aesthetics: A Handbook for Scenery Management*. 1995. Glossary.

Webster's Ninth New Collegiate Dictionary. 1990.

## DEFINITIONS

### A

**accessibility** – The relative ease or difficulty of getting from or to a place, especially the ability of a site, facility or opportunity to be used by persons of varying physical and mental abilities.

**accessible facility** - A single or contiguous group of improvements, that exists to shelter or support Forest Service Programs that is in compliance with the highest standard of current Federal or Forest Service accessibility guidelines, at the time of construction.

**acid deposition** - Rain, snow, or particulate matter containing high concentrations of acid anions (e.g. nitrate and sulfate), usually produced by atmospheric transformation of the by-products of fossil fuel combustion. Precipitation with a pH lower than 5.0 is generally considered to be acidic.

**acid neutralizing capacity** - The total capacity of a water sample to neutralize acids, as determined by titration with a strong acid. Acid neutralizing capacity includes alkalinity (e.g. carbonate) plus base cations.

**acidification** – To convert into an acid or become acid.

**Agriculture Conservation Program** – USDA cost-share program for streambank improvement.

**acquisition of land** - Obtaining full landownership rights by donation, purchase, exchange, or condemnation.

**acre** – A land area of any shape containing 43,560 square feet of ground surface.

**acre-equivalents** - The number of acres of forest habitat improved or affected by the installation of various wildlife habitat improvements in an area. Determined by multiplying by various coefficients.

**acre-foot** - A measurement of water volume, equal to the amount of water that would cover an area of 1 acre to a depth of 1 foot (specifically 43,560 cubic feet or 325,851 gallons).

**activity** - A measure, course of action, or treatment that is undertaken to directly or indirectly produce, enhance, or maintain forest and rangeland outputs, or to achieve administrative or environmental quality objectives.

**adaptive management** – A dynamic approach to forest management in which the effects of treatments and decisions are continually monitored and used, along with



research results, to modify management on a continuing basis to ensure objectives are being met.

**administrative unit** - All the National Forest System lands where one forest supervisor has responsibility. The basic geographic management area within a Forest Service Region, station, or area.

**advance regeneration (reproduction)** - Seedlings or saplings that develop, or are present, in the understory.

**aerial logging** - A yarding system employing aerial means (e.g., helicopters or balloons) to lift logs.

**afforestation** - Establishment of a forest or stand in an area not recently forested.

**age class** - A grouping of living things based on their age.

**age class (cohort)** - A distinct aggregation of trees originating from a single natural disturbance or regeneration cutting.

**age dependent relationships** - A SPECTRUM model-specific term meaning that the timing of an activity or of an output is a function of the age of the forest cover.

**agricultural land** - Areas used primarily for production of food and/or fiber (excludes wood fiber). Examples include cropland, pasture, orchards, vineyards, nurseries, confined feeding areas, farmsteads, and ranch headquarters.

**air pollution** - Any substance or energy form (heat, light, noise, etc.) that alters the state of the air from what would naturally occur.

**air quality class** - Three broad classifications used to prevent significant deterioration of air quality for all areas of the country.

**Class I** - All areas where essentially any degradation of air quality would be considered significant deterioration.

**Class II** - All areas where moderate degradation over baseline concentrations are allowed.

**Class III** - All others.

**air quality (PSD) class** - Three broad classifications established by the CAA to help prevent significant deterioration of air quality for all areas of the country that are known (or assumed) to be attaining NAAQS.

**Class I** - Select wilderness areas and national parks where identified air quality related values might become (or currently are) adversely affected by even a small increment of additional air pollution. To date, there are 156 such areas, nationwide.

**Class II** – Areas the states may designate to receive such additional amount of air pollution (even up to 30 times the Class I area increment) that air quality may deteriorate from baseline to (but not below) NAAQS. To date, there are no such areas, nationwide.

**Class III** - All other areas, by default, where a moderate level of additional air pollution is deemed acceptable. The bulk of the U.S.

**air quality related values** – Terminology used in the PSD portion of the CAA describing values associated with certain resources that may become impaired by air pollution. Typically, these include aquatic habitats, terrestrial habitats, and visibility.

**all-aged stand** – A stand with trees of all, or almost all age classes, including those of exploitable age.

**allocated fund** - Funds transferred from one agency or bureau to another for carrying out the purpose of the parent appropriation and agency.

**allocation** - The assignment of management prescriptions or combination of management practices to a particular land area to achieve the goals and objectives of the alternative.

**allopatric** – Condition where one species lives in a section of stream without other closely related species. The species have disjunct distributions. Opposite of sympatric.

**allotment management plan** - The basic land unit used to facilitate management of the range resource on National Forest System Lands and associated lands administered by the Forest Service.

**allowable sale quantity (ASQ)** - The quantity of timber that may be sold from the area of suitable land covered by the Forest Plan for a time period specified by the Forest Plan. This quantity is usually expressed on an annual basis as the “average annual allowable sale quantity.”

**all-terrain vehicle (ATV)** - Any motorized, off-highway vehicle 50 inches or less in width, having a dry weight of 600 pounds or less that travels straddled by the operator. Low-pressure tires are six inches or more in width and designed for use on wheel rim diameters of 12 inches or less, utilizing an operating pressure of 10 pounds per square inch (psi) or less as recommended by the vehicle manufacturer.

**alternative** - In forest planning, a mix of resource outputs designed to achieve a desired management emphasis as expressed in goals and objectives, and in response to public issues or management concerns.

**amendment** - A formal alteration of the Forest Plan by modification, addition, or deletion. Forest Plan amendment requires an environmental analysis. Significant findings require an environmental impact statement and the amendment will follow the same procedure used for plan preparation. Insignificant findings allow the

changes to be implemented following public notification. Amendments can take place at any time following plan approval.

**amenity values** - Features or qualities which are pleasurable or aesthetic, as contrasted with the utilitarian features of a plan, project, location, or resource.

**analysis area** - A collection of lands, not necessarily contiguous, sufficiently similar in character that they may be treated as if they were identical.

**analysis area identifier** - A resource characteristic used to stratify the land into capability areas and analysis areas.

**Analysis of the Management Situation (AMS)** - A determination of the ability of the planning area to supply goods and services in response to society's demand as a basis for formulating the range of alternatives.

**animal unit month** - The quantity of forage required by one mature cow and her calf (or the equivalent, in sheep or horses), for one month; 682 pounds of air-dry forage.

**annual forest program** - The summary or aggregation of all projects that make up an integrated (multifunctional) course of action for a given level of funding of a forest planning area. The program must be consistent with the Forest Plan.

**annual work planning process** - Preparation of technical plans that serve to implement land and resource management, and program decisions contained in the integrated land, resource plans, and budget allocations.

**appropriated fund** - Funds available for obligation or outlay by Congress to a given agency.

**appropriate management response** - The response to a wildland fire based on an evaluation of risks to firefighters and public safety. The evaluation must take into account the circumstances under which the fire occurs, including weather and fuel conditions, natural and cultural resource management objectives, protection priorities, and values to be protected. The evaluation must also include an analysis of the context of the specific fire within the overall logic, geographic area, or national wildland fire situation.

**aquatic ecosystem** - Waters of the United States, including wetlands, that serve as habitat for interrelated and interacting communities and populations of plants and animals (40 CFR 230.3). The stream channel, lake or estuary bed, water, biotic communities and the habitat features that occur therein. (USFS 2526.05).

**aquatic habitat types** - The classification of instream habitat based on location within channel, patterns of water flow, and nature of flow controlling structures. Riffles are divided into three habitat types: low gradient riffles, rapids, and cascades. Pools are divided into seven types: secondary channel pools, backward pools, trench pools, plunge pools, lateral scour pools, dammed pools, and beaver ponds. Glides, the third habitat type, are intermediate in many characteristics between riffles and pools. It is recognized that as aquatic habitat types occur in various parts of the country,

additional habitat types may have to be described. If necessary, the regional fishery biologist will describe and define the additional habitat types.

**artificial regeneration (reproduction)** - Creation of a new age class by renewal of a tree crop by direct seeding, or by planting seedlings or cuttings.

**authorized use** - Specific activity or occupancy, including a ski area, historical marker, or oil and gas lease, for which a special authorization is issued.

## **B**

**background** - The space beyond the middle ground in a picture or landscape. Generally, the middle ground ends at one-half to four miles distance from the viewer.

**bald** - An early successional opening generally above 4,000 feet, characterized by grassy or heath vegetation.

**basal area** - The area of the cross-section of a woody stem, inclusive of bark, at breast height (4.5 feet or 1.37 meters above the ground) most commonly expressed as square feet per acre or square meters per hectare.

**basal spray** - The application of a pesticide, usually a herbicide, for controlling brush or weed trees, directed at the base of the stem.

**base sale schedule** - A timber sale schedule formulated on the basis that the quantity of timber planned for sale and harvest for any future decade is equal to, or greater than, the planned sale and harvest for the preceding decade. The planned sale and harvest for any decade must not be greater than the long-term sustained yield capacity.

**best management practice (BMP)** - Methods, measures, or practices to prevent or reduce water pollution, including but not limited to, structural and non-structural controls, operation and maintenance procedures, and other requirements, scheduling, and distribution of activities. Usually BMPs are applied as a system of practices rather than a single practice.

**bike** - 1.(as used in the land management plan) A unit typically with two wheels in tandem, pedal powered with no motorized auxiliary propulsion mechanism. Unit has handle bars for steering and may have tandem seats. 2.(not used with this meaning in plan management direction) A motorcycle used on OHV trails.

**biodiversity** - The variety of life in an area, including the variety of gene pools, species, plant and animal communities, ecosystems, and the processes through which individual organisms interact with one another, and their environments.

**biological assessment** - A "biological evaluation" conducted for major federal construction projects requiring an environmental impact statement, in accordance with legal requirements under Section 7 of the Endangered Species Act (16 U.S.C. 1536(c)). The purpose of the assessment and resulting document is to determine

whether the proposed action is likely to affect an endangered, threatened, or proposed species.

**biological evaluation** - A documented Forest Service review of its programs or activities in sufficient detail to determine how an action or proposed action may affect any proposed, endangered, threatened, or sensitive species.

**biological growth potential** - The average net growth attainable on a fully-stocked natural forest land.

**biological oxygen demand** - Dissolved oxygen required by organisms for the aerobic biochemical decomposition of organic matter present in water.

**biosphere** - Living beings together with their environment.

**bladed skid road** - A temporary travel way in forested areas developed for use by skidders, fellers and other harvesting equipment to drag or skid felled trees or logs from a stump to a log deck. Skid roads require excavation of a bladed travel route to allow equipment use. Skid roads are closed and revegetated following termination of use periods.

**board foot** - A unit of timber measurement equaling the amount of wood contained in an unfinished board 1 inch thick, 12 inches long, and 12 inches wide. Commonly, 1,000 board feet is written as 1 MBF, and 1,000,000 board feet is written as 1MMBF.

**browse** - Young twigs, leaves and tender shoots of plants, shrubs or trees that animals eat.

**Built Environment Image Guide (BEIG)** - A guide for design of administrative and recreation buildings, landscape structures, site furnishings, wayside structures, and signs installed or operated by the Forest Service, its cooperators and permittees.

**burning (prescribed)** - See 'prescribed fire.'

## C

**cable logging** - A term for any system involving transport of logs along, or by means of steel cables with the load being lifted partly or wholly off the ground.

**cankers** - A usually well-defined sunken or swollen dead area on the stem or branch of a host resulting from the death of the cambium layer caused by disease or injury. (*adapted from saf, 1998*)

**canopy cover** - See 'crown cover.'

**canopy gap** - In forest ecology, a space occurring in the general forest crown cover caused by the fall or death of one or more trees forming it. (*adapted from saf, 1998*)

**canopy cover** - The percent of a fixed area covered by the crown of an individual plant species or delimited by the vertical projection of its outermost perimeter. Small openings in the crown are included. Used to express the relative importance of individual species within a vegetation community, or to express the canopy cover of woody species. Canopy cover may be used as a measure of land cover change or trend. Often used for wildlife habitat evaluations.

**capability** - The potential of a land area to produce resources, supply goods and services, and allow resource uses under an assumed set of management practices and a given level of management intensity. Note: capability depends upon the current conditions and site conditions including climate, slope, land form, soils and geology, as well as the application of management practices such as silviculture and protection from fire, insects, and disease.

**carrying capacity** - The number of organisms of a given species and quality that can survive in, without causing deterioration of, a given ecosystem through the least favorable environmental conditions that occur within a stated interval of time.

**channelled ephemeral streams** - Ephemeral streams that have a defined channel of flow where surface water converges with enough energy to remove soil, organic matter, and leaf litter.

**channelization** - Artificial change of a stream channel profile.

**Clean Air Act of 1970** - A congressional act, along with the amendments passed in 1977 and 1990, that provides authority for the Environmental Protection Agency to develop specific regulations controlling air pollution.

**cleaning** - A release treatment made in an age class, not past the sapling stage, in order to free the favored trees from less desirable individuals of the same age class which can overtop them.

**clearcutting** - The harvesting in one cut of all trees on an area for the purpose of creating a new, even-aged stand. The area harvested may be a patch, stand, or strip large enough to be mapped or recorded as a separate age class in planning for sustained yield under area regulation. A method of regenerating an even-aged stand. Regeneration is from natural seeding, direct seeding, planted seedlings, and/or advance reproduction. Harvesting may be done in groups or patches (group or patch clearcutting), or in strips (strip clearcutting). In the clearcutting system, the management unit or stand in which regeneration, growth, and yield are regulated consists of the individual clearcut stand.

**clearcutting with reserves** - A two-aged regeneration method in which varying numbers of reserve trees are not harvested to attain goals other than regeneration.

**climax** - The culminating stage in plant succession for a given environment with the vegetation having reached a highly stable condition.

**closed road/trail** - A road that is closed for public use.

**cluster site** – An aggregate of cavity trees plus a 200-foot buffer around this cluster of trees. In most cases, this cluster of trees can be encompassed by a circle 1,500 feet in diameter. A cluster must include at least one cavity tree. A cluster is identified as a stand of 10 acres or more. An active cluster is one that is occupied by RCW in a given survey year.

**coarse woody debris (CWD)** – Any piece(s) of dead woody material, e.g., dead boles, limbs, and large root masses, on the ground in forest stands, or in streams.

**co-dominant trees** - Trees or shrubs with crowns receiving full light from above, but comparatively little from the sides. Crowns usually form the general level of the canopy.

**cohort** – See ‘age class (cohort).’

**cold water fishery** - Aquatic habitats that predominately support fish species that have temperature tolerances up to about 70°F, and exhibit their greatest reproductive success at temperatures below 65°F (18.3°C).

**commercial forest land (CFL)** – Land declared suitable for producing timber crops and not withdrawn from timber production by statute or administrative regulations (from SAF dictionary). Existing technology and knowledge must be available to ensure timber production without irreversible damage to soils productivity, or watershed conditions. Adequate restocking can be attained within five years after final harvesting.

**commercial thinning** – Any type of thinning producing merchantable material at least equal to the value of the direct cost of harvesting.

**commercial tree species** – (1) Tree species suitable for industrial wood products. (2) Conifer and hardwood species used to calculate the commercial forest land allowable sale quality.

**commodity outputs** - A resource output with commercial value. All resource products that are articles of commerce.

**communication site** – (1) An area adapted by the Forest Service for administrative communications use. (2) An area approved by the Forest Service through a special use authorization, interagency agreement, or other permitting procedure for the placement and operation of equipment which transmits and receives communications signals.

**community** – Ecologically, an assemblage of plants and animals living together and occupying a given area. (SAF, 1998)

**compartment** – A portion of a forest under one ownership, usually contiguous and composed of a variety of forest stand types, defined for purposes of locational reference.

**competitive zone** – A term used in the forest products analysis of the EIS for an area surrounding each of the historic Chattahoochee and the Oconee timber market areas and having a width equal to the average procurement distance of the nearest mill that was used to delineate the market area, adjusted outward to include the entirety of counties 50-percent or more within it and dropping counties less than 50-percent within it.

**composition (stand)** - The proportion of each tree species in a stand expressed as a percentage of the total number, basal area, or volume of all tree species in the stand.

**concentrated use area (CUA)** - An undeveloped site or area located within a general forest area, generally not in the Infrastructure system, but receiving investments of management time and/or dollars because recreation use leaves evident impacts such as litter, vandalism or soil compaction. Any amenities in a CUA are placed and managed for resource protection rather than user convenience.

**concern level** - A particular degree or measure of viewer interest in the scenic qualities of the landscape, rated level (highest concern) to 3 (lowest concern).

**constraint** - A restriction or limit that must be met.

**Continuous Inventory of Stand Condition (CISC)** - A system that continuously reflects an up-to-date description of timber stands. It tells what and when actions are planned for stands and gives some information about actions that have taken place. It is also the name of the data base management computer system used for the storage and retrieval of data.

**control line** – An inclusive term for all constructed or natural barriers and treated fire edges used to control a fire. (See also, “fireline.”)

**conventional logging** - A term used to identify methods commonly used in an area to move logs from stump to mill.

**conversion (forest management)** – A change from one forest type, or other plant community, to another on land that has the capability of both. Usually reserved to refer to a human-caused change. See “succession.” (*adapted from saf, 1998.*)

**coppice** - A method of regenerating a stand in which all trees in the previous stand are harvested and the majority of regeneration is from stump sprouts or root suckers.

**coppice with reserve** - A two-aged regeneration method in which reserve trees are retained to goals other than regeneration. This method normally creates a two-aged stand.

**cord** - A unit of gross volume measurement for stacked, round wood based on external dimensions, generally implies a stack of 4 x 4 feet vertical cross section and 8 feet long. Contains 128 stacked cubic feet.

**corridor** - (1) A linear strip of land identified for the present or future location of transportation or utility rights-of-way within its boundaries. (2) A defined tract of land



connecting two or more areas of similar management or habitat type, e.g. riparian corridor.

**cost efficiency** – The usefulness of specified inputs (costs) to produce specified outputs (benefits). In measuring cost efficiency, some outputs, including environmental, economic, or social impacts, are not assigned monetary values, but are achieved at specified levels in the least cost manner. Cost efficiency is usually measured using present net value. 36 CFR 219.3

**Council on Environmental Quality** - An advisory council to the president established by the National Environmental Policy Act of 1969. It reviews federal programs for their effect on the environment, conducts environmental studies, and advises the president on environmental matters.

**coverage** - A file-based vector data storage format for storing the location, shape, and attributes of geographic features in a GIS system. A coverage usually represents a single theme such as soils, streams, roads, or land use. It is one of the primary vector data storage formats for ArcInfo. A coverage stores geographic features as primary features (such as arcs, nodes, polygons, and label points) and secondary features (such as tics, map extent, links, and annotation). Associated feature attribute tables describe and store attributes of the geographic features.

**creel survey** - A survey of anglers.

**critical habitat** - Habitat determined by the Secretary of Interior to be essential to the conservation of a particular endangered or threatened species.

**crown** - the part of a tree or woody plant bearing live branches and foliage. (SAF, 1998)

**crown class** - A category of tree based on its crown position relative to adjacent trees. (From SAF Dictionary of Forestry)

**co-dominant** - A tree whose crown helps to form the general level of the main canopy in even-aged stands, or in uneven-aged stands, the main canopy of its immediate neighbors, but in either case receiving full light from above and comparatively little from the sides.

**dominant** - A tree whose crown extends above the general level of the main canopy in even-aged stands, or in uneven-aged stands, the main canopy of its immediate neighbors but in either case receiving full light from above and partial light from the sides.

**emergent** - A tree whose crown is completely above the general level of the main canopy receiving full light from above and from all sides.

**intermediate** - A tree whose crown extends into the lower portion of the main canopy in even-aged stands, or in uneven-aged stands, into the lower portion of the main canopy of its immediate neighbors but in either case being shorter in

height than the codominants and receiving little direct light from above and none from the sides.

**overtopped (suppressed)** - A tree whose crown is completely overtopped by (that is, underneath) the crowns of one or more neighboring trees.

**crown cover** - The ground area covered by the crowns of trees or woody vegetation as delimited by the vertical projection of crown perimeters and commonly expressed as a percent of total ground area. (SAF, 1998) Typically applied to the canopy formed by the dominant and co-dominant crown classes. A synonym is canopy cover.

**cubic foot** - A unit of measure reflecting a piece of wood 12 inches long, 12 inches wide, and 12 inches thick.

**culmination of mean annual increment (CMAI)** - Age at which average rate of annual tree growth stops increasing and begins to decline. Mean annual increment is expressed in cubic feet and is based on expected growth, according to the management intensities and utilization standards assumed in accordance with 36 CFR 219.16(a)(2)(i) and (ii). Culmination of mean annual increment includes regeneration harvest yields, and any additional yields from planned intermediate harvests.

**cultural resources** - Physical remains of districts, sites, structures, buildings, networks or objects that were used by humans. They may be historic, prehistoric, archaeological or architectural in nature. Cultural resources are non-renewable.

**cunit** - A unit of volume, usually of pulpwood, consisting of 100 cubic feet of solid wood. Commonly, 100 cubic feet is expressed as 1 CCF.

**cut-offs** - Analysis constraints that prevent the valuation of non-timber outputs produced in excess of demand plus x percent. It ensures that the assumptions of a horizontal demand curve are not violated.

**cutting cycle** - The planned interval between partial harvests in a stand being managed with an uneven-aged regeneration method.

## **D**

**daylighting** - The practices of cutting back edges of roads or trails by removing shrub and tree growth.

**deciduous** - Having foliage that sheds or falls off seasonally.

**decision criteria** - Rules or standards used to evaluate and rank alternatives.

**decommission** - Demolition, dismantling, removal, obliteration and/or disposal of a deteriorated or otherwise unneeded asset or component, including necessary cleanup work. This action eliminates the deferred maintenance needs for the fixed asset. Portions of an asset or component may remain if they do not cause problems

nor require maintenance. (Financial Health – Common Definitions for Maintenance and Construction Terms, July 22, 1998)

**defoliation** – Loss of leaves due to insect feeding, disease, or injury.

**demand** - The amount of a good or service that the market will consume under specified conditions of quantity (supply) and price.

**demand curve** – The line connecting the points on a graph of the amount of a good or service the market will consume having price on the vertical axis and quantity (supply) on the horizontal axis. Typically, such a curve will descend to the right; that is, price falls with increasing supply.

**den trees** - Trees having rainproof, weather-tight cavities used by wildlife.

**designated trail** – A travel way that is clearly and consistently identified in Forest Service recreation information to the public for a particular type of use. On-the-ground identification by signing or other means may also occur, but is not necessary to “designation.”

**desired future condition** - An expression of resource goals that have been set for a unit of land. It is written as a narrative description of the landscape as it will appear when the goals have been achieved. The condition also includes a description of physical and biological processes, the environmental setting, and the human experience.

**desired landscape character** - Appearance of the landscape character to be retained or created over time, recognizing that a landscape is a dynamic and constantly changing community of plants and animals. It includes the combination of landscape design attributes and opportunities, as well as biological opportunities and constraints. See also, “landscape character.” The following terms are used to describe specific desired landscape characters in the LRMP:

**naturally evolving** – landscape character expressing the natural evolution of biophysical features and processes, with very limited human intervention.

**natural appearing** – Landscape character that expresses predominantly natural evolution, but also human intervention including cultural features and processes.

**cultural** – Landscape character expressing built structures and landscape features that display the dominant attitudes and beliefs of specific human cultures.

**pastoral** - Landscape character expressing dominant human-created pastures, meadows, and associated structures, reflecting valued historic land uses and lifestyles.

**agricultural** - Landscape character expressing dominant human agricultural land uses producing food crops and domestic products.

**historic** - Landscape character expressing valued historic features that represent events and periods of human activity in the landscape.

**urban** - Landscape character expressing concentrations of human activity, primarily in the form of commercial, cultural, educational, residential, and transportation structures, and supporting infrastructure.

**developed recreation** - Recreation use or opportunities occurring at developed sites.

**developed recreation site** - A discrete place containing a concentration of facilities and services used to provide recreation opportunities to the public and evidencing a significant investment in facilities and management under the direction of an administrative unit in the National Forest System.

**development level** - An indication of site modification based on classes in the Recreation Opportunity Spectrum. Development Level 1 equates to Primitive, with minimum site modification; 2 equates to Semi-Primitive Motorized/Nonmotorized, with little site modification; 3 equates to Roaded, with moderate modification; 4 equates to Rural, with heavy site modification; and 5 relates to Urban, with a high degree of site modification. See *Facilities level*, below, and FSM 2330.3, Exhibit 1.

**diameter at breast height (dbh)** - A tree's diameter measured at about 4.5 feet (1.37m) above the forest floor on the uphill side of the tree. For the purposes of determining breast height, the forest floor includes the duff layer that may be present, but does not include unincorporated woody debris that may rise above the ground line.

**diameter class** - Any of the intervals into which a range of diameters of tree stems may be divided for classification and use, (e.g., 10-inch class includes diameters from 9.5 inches to 10.49 inches).

#### **Digital Elevation Model (DEM)**

1. A digital representation of a continuous variable over a two-dimensional surface by a regular array of z-values referenced to a common datum. Digital elevation models are typically used to represent terrain relief. Also referred to as digital terrain model (DTM).
2. An elevation database for elevation data by map sheet from the National Mapping Division of the U.S. Geological Survey (USGS).
3. The format of the USGS digital elevation datasets.

#### **digitize**

1. To encode geographic features in digital form as x,y coordinates.
2. The process of converting the features on a paper map into digital format. When you digitize a map, you use a digitizing tablet, or digitizer, which is connected to your computer. You then trace over features with a digitizer puck, which is similar to a mouse. The x,y coordinates of these features are automatically recorded and stored as spatial data.
3. Heads-up digitizing features from on-screen data (rasters, for example).

**dispersed recreation** - Recreation opportunities or use occurring in the general forest area. Does not take place in developed sites. Examples are camping and picnicking.

**disturbance (ecology)** - Any relatively discrete event in time that disrupts the ecosystem, community, or population structure and changes resources, substrate availability, or the physical environment.

**disturbance regime** – See ‘disturbance-recovery regime.’

**disturbance-recovery regime** – A natural pattern of periodic disturbance followed by a period of recovery. Examples include fire or flooding.

**diversity** - The distribution and abundance of different plant and animal communities and species within the area covered by a land and resource management plan.

**division** - An ecological unit in the ecoregion planning and analysis scale of the National Hierarchical Framework corresponding to subdivisions of a Domain that have the same regional climate.

**domain** - An ecological unit in the ecoregion planning and analysis scale of the National Hierarchical Framework corresponding to groups of ecoregions with related climates.

**drainage area/basin** - The total area above a given point on a stream that contributes to the flow at that point. Term is often used interchangeably with watershed.

**drum chopping** - Method used to prepare areas for reforestation. Large drums with cutting blades attached are pulled over areas by vehicles that include crawler-type tractors and rubber-tired skidders.

## **E**

**early-successional forest** – The biotic community that develops immediately following the removal or mortality of most or all of forest canopy, resulting in a predominance of woody species regeneration. As used in the Environmental Impact Statement and Plan, a stand age of 0 to 10 years is used to define this condition. See ‘successional stage.’

**early-successional habitat** - A vegetative condition typically characterized by low density to no tree canopy cover and an abundance of herbaceous and/or woody ground cover. This condition may include early-successional forest, maintained openings, pastures, balds, and open woodlands.

**early-successional species** - Plant or animal species characteristic of early forest successional stages.

**ecological approach** – A type of natural resource planning, management, or treatment that ensures consideration of the relationship among all biotic organisms, including human, and their abiotic environment. (SAF 1998)

**ecological classification** – A multifactor approach to categorizing and delineating, at different levels of resolution, areas of land and water having similar characteristic combinations of physical environment (such as topography, climate, geomorphic processes, geology, soils, and hydrology), biological communities (such as plants, animals, and potential vegetation), and human factors (such as social, economic, cultural, and infrastructure). (SAF, 1998)

**ecological dynamics** – Changes in plant and animal communities over time either in response to disturbance or to the lack of it.

**ecological classification system** - A hierarchical system used to help organize and coordinate the classification of ecological types and units, and to facilitate comparisons. Classification is ecologically based and integrates existing resource data including climate, topography, geology, soil, hydrology, and vegetation. The system includes many levels (from the top-down approach): domain, division, province, section, subsection, land type association, land type, land type phase, and site.

**ecoregion** - A scale of planning and analysis in the National Hierarchical Framework that has broad applicability for modeling and sampling, strategic planning and assessment, and international planning. Ecoregions include Domain, Division, and Province ecological units.

**ecosystem** - A complete interacting system of organisms and their environment.

**ecosystem/cover type** - The native vegetation ecological community considered together with non-living factors of the environment as a unit. The general cover type occupying the greatest percent of the stand location, based on tree or plant species forming a plurality of the stocking within the stand. May be observed in the field, or computed from plot measurements.

**ecotone** – A transition zone between two adjoining communities. (SAF, 1998)

**electronic sites** - Areas designated for the operation of equipment which transmits and receives communication signals.

**endangered species** - Any species that is in danger of extinction throughout all or a significant portion of its range, other than members of the class *Insecta* that have been determined by the Department of Interior to constitute a pest whose protection under the provisions of this (Endangered Species Act of 1973) act would present an overwhelming and overriding risk to humans. Must be designated in the *Federal Register* by the appropriate secretary.

**Endangered Species Act of 1973** - An act that enables endangered and threatened species to be conserved. It provides a program for the conservation of such species, and takes appropriate steps to achieve the purposes of the (relevant) treaties and conventions.

**endemic plant/organism** – Species restricted to a particular geographic area.

**ending inventory** - The standing volume at the end of the planning horizon. It must be adequate for the maintenance of long-term sustained yield.

**environment** - All the conditions, circumstances, and influences surrounding and affecting the development of an organism or group of organisms.

**environmental consequence** - The result or effect of an action upon the environment.

**Environmental Impact Statement (EIS)** - A disclosure document revealing the environmental effects of a proposed action, which is required for major federal actions under Section 102 of the National Environmental Policy Act. The draft Environmental Impact Statement (DEIS) is released to the public and other agencies for comment and review. The Final Environmental Impact Statement (FEIS) is the final version of the statement disclosing environmental effects required for major federal actions under Section 102 of the National Environmental Policy Act.

**environmental impact** - Used interchangeably with environmental consequence or effect.

**ephemeral streams** - Streams having flows that occur for short periods of time in direct response to storm precipitation or snowmelt runoff. Their bottoms are always above the water table and do not contain fish or aquatic insects that have larvae with multiple-year life cycles. Ephemeral streams may have a defined channel, but may be manifested as a natural swale or depression with vegetation and organic material covering the bottom.

**epidemic** – A pest situation characterized by high or very high population levels, a significant proportion of host affected, and rapid spread. (*adapted from SAF, 1998*)

**erosion** - The wearing away of the land surface by the action of wind, water, or gravity.

**erosion (accelerated)** - Erosion much more rapid than normal, natural, or geologic erosion. Occurs primarily as a result of the influences of human activities, or in some cases of other animals, or of a catastrophe in nature, for example fire, that exposes the surface.

**erosion (geologic)**. The normal or natural erosion caused by geologic processes acting over long geologic periods and resulting in the wearing away of mountains and the building up of flood plains, coastal plains, etc. Synonym: natural erosion.

**essential habitat** - Habitat in which threatened and endangered species occur, but which has not been declared as critical habitat. Occupied habitat or suitable unoccupied habitat necessary for the protection and recovery of a federally designated threatened or endangered species.

**eutrophication** – The process by which a body of often shallow water becomes either naturally, or by pollution, rich in dissolved nutrients, especially nitrates and phosphates, with a seasonal deficiency in dissolved oxygen.

**evapo-transpiration** - The transfer of water vapor to the atmosphere from soil and water surfaces (evaporation), and from living plant cells (transpiration).

**even-aged management** – The application of a combination of actions that results in the creation of stands in which trees of essentially the same age grow together. Managed even-aged forests are characterized by a distribution of stands of varying ages (and, therefore, tree sizes) throughout the forest area. The difference in age between trees forming the main canopy level of a stand usually does not exceed 20 percent of the age of the stand at harvest rotation age. Regeneration in a particular stand is obtained during a short period at or near the time that a stand has reached the desired age or size for regeneration and is harvested. Clearcut, shelterwood, or seed tree cutting methods produce even-aged stands. *36 CFR 219.3*

**even-aged silvicultural system** - A planned sequence of treatments designed to maintain and regenerate a stand with one age class.

**even-aged stand** - A stand of trees containing a single age class in which the range of tree ages is usually less than 20 percent of rotation.

**evergreen** – Having foliage that remains green and functioning through more than one growing season. (*Webster's Ninth New Collegiate Dictionary, 1990*)

**existing old growth** – Forest stands or patches that meet the age, disturbance, basal area, and tree size criteria described in the operational definitions of the sixteen forest community types. A stand or patch must meet all four criteria in order to be classified as existing old growth. (*R8-FR 62 June 1997*)

**extirpation** – Extinction of a species from all or part of its range.

## **F**

**facilities level** - A term that refers to campgrounds, expressed as Development Level 1-5. (See 'development level') Customers in levels 1 and 2 campgrounds generally seek a relatively primitive experience with a minimum of facilities for comfort or convenience. Tent camping dominates and spurs are too short to accommodate most RVs. Utilities are not provided and access is most difficult. Level 3 developments are called "Recreational Vehicle/Travel Trailer Parks" in national electrical and plumbing codes. The focus is on tent campers and small RVs that do not contain a water closet or bathing facilities. Spur length is usually limited to 35'; low amperage electrical service may be provided. Water hydrants are centrally located to serve 3-5 sites, and flush toilets are typical. Traditionally, a moderate degree of accessibility is provided. Level 4 and 5 developments serve users with RVs of all types. Showers, flush toilets and other amenities are available; individual water, sewer and electrical hookups are commonly provided; service buildings are located within 200 - 300 feet of all sites.

**facility** - A single or contiguous group of improvements that exists to shelter or support Forest Service Programs. The term may be used in either a broad or narrow



context; for example, a facility may be a ranger station compound, lookout tower, leased office, work center, separate housing area, visitor center, research laboratory, recreation complex, utility system, or telecommunications site”.

**farmer-owned land** - Owned by farm operators, excluding incorporated farm ownerships.

**feathering** A treatment used along the edges of openings in the forest canopy to reduce shadow contrasts by manipulating the density and size of vegetation.

**featured species** - The selected wildlife species whose habitat requirements guide wildlife management including coordination, multiple use planning, direct habitat improvements, and cooperative programs for a unit of land. In context of land management planning, featured species are similar to management indicator species.

**Federal Register** - The official daily publication for Rules, Proposed Rules, and Notices of Federal agencies and organizations, as well as Executive Orders and other Presidential Documents.

**felling** – The cutting down of trees.

**final crop** – That portion of the growing stock (to be) kept until final commercial harvest, (i.e., final product objective).

**fire condition class** – Based on coarse scale national data, classes measure general wildfire risk:

**Class One** – Fire regimes are usually within historical ranges. Vegetation composition and structure are intact. The risk of losing key ecosystem components from the occurrence of fire is relatively low.

**Class Two** – Fire regimes on these lands have been moderately altered from their historical range by increased or decreased fire frequency. A moderate risk of losing key ecosystem components has been identified.

**Class Three** – Fire regimes on these lands have been significantly altered from their historical return interval. The risk of losing key ecosystem components from fire is high. Fire frequencies have departed from historical ranges by multiple return intervals. Vegetation composition, structure and diversity have been significantly altered.

**fire management effectiveness index** - A measure of the effectiveness of annual fire management operational programs. Measured in dollars per thousand acres protected, the objective is to minimize the index value.

**fire management plan** – Strategic plans that define a program to manage wildland fires based on an area’s approved land management plan. They must address a full range of considerations: fire management activities that support ecosystem sustainability, values to be protected, protection of firefighters and public safety, as

well as public health and environmental issues. The provisions of the plan must be consistent with resource management objectives and activities of the area.

**fire regime** – A generalized description of the role a fire plays in the ecosystem. It is characterized by fire frequency, predictability, seasonality, intensity, duration, scale (patch size), and regularity or variability. Five combinations of fire frequency exist.

**Groups One and Two** include fire return intervals in the 0-35 range. One includes Ponderosa Pine, other long needle pine species, and dry site Douglas Fir. Group Two includes the drier grassland types - tall grass prairie, and some Pacific chaparral ecosystems.

**Groups Three and Four** include fire return intervals in the 35-100+ year range. Group Three includes interior dry site shrub communities including sagebrush and chaparral ecosystems. Group Four includes Lodgepole and Jack Pine.

**Group Five** is the long interval (infrequent), stand replacement fire regime and includes temperate rain forest, boreal forest, and high elevation conifer species.

**fire use** – The combination of wildland fire use and prescribed fire application to meet resource objectives.

**fireline** - The part of a control line that is scraped or dug to mineral soil. Also called fire trail. (See also “control line.”)

**fisheries classification** - Water bodies and streams classed as having a cold- or warm-water fishery. This designation is dependent upon the dominant species of fish occupying the water.

**fisheries habitat** - Streams, lakes, and reservoirs that support fish.

**floodplains** - Lowland or relatively flat areas joining inland and coastal water including, at a minimum, that area subject to a 1-percent (100-year return period) or greater chance of flooding in any given year. Although floodplains and wetlands fall within the riparian area, they are defined here separately as described in the Forest Service Manual.

**floor on first period production** - The minimum harvest volume in the first period that should be produced to prevent a significant impact on the local economy.

**forage** - All browse and non-woody plants that are available to livestock or game animals used for grazing or harvested for feeding.

**forage production** - The weight of forage that is produced within a designated period of time on a given area. The weight may be expressed as green, air dry, or oven dry. The term may also be modified as to time of production including annual, current years, or seasonal forage production.

**forb** – A broadleaf plant that has little or no woody material in it.

**foreground** - The area between the viewer and the middle ground in a landscape; generally from zero to one-half mile distance.

**forest** - An area managed for the production of timber and other forest products, or maintained under woody vegetation for indirect benefits as protection of a watershed, recreation, or wildlife habitat.

**forest cover type** – 1) A text name for a specific composition of tree community; for example, shortleaf pine-oak, assigned using standard rules, or 2) a matching numeric code in a database.

**forest development road** - A road wholly or partly within, or adjacent to, and serving a part of the National Forest System. It also has been included in the Forest Development Road System Plan.

**forest ecology** – A branch of science concerned with the interrelationships of forests and their environment. (adapted from *Webster's Ninth New Collegiate Dictionary, 1990*)

**forest health** – The perceived condition of a forest derived from concerns about such factors as its age, structure, composition, function, vigor, presence of unusual levels of insects or disease, and resilience to disturbance.

**forest land** - Land at least 10 percent occupied by forest trees of any size, or formerly having had such tree cover, and not currently developed for non-forest use. Lands developed for non-forest use include areas for crops, improved pasture, residential, or administrative areas, improved roads of any width, adjoining road clearing, and power line clearing of any width.

**forest pathology** – The branch of forestry concerned with the diseases and disorders of forest trees, individually and collectively. (SAF, 1998)

**Forest Service Handbook (FSH)** - A handbook that provides detailed instructions for proceeding with specialized phases of programs or activities for Forest Service use.

**Forest Service Manual (FSM)** - Agency manuals that provide direction for Forest Service activities.

**forest trail system** - Trails that are part of the forest transportation system. A designated path commonly used and maintained for hikers, horse riders, bicycles, or two-wheeled motorized vehicles.

**forest type** - A descriptive term used to group stands of similar vegetative composition as based on a percentage cover of trees.

**Forest Supervisor** - The official responsible for administering the National Forest System lands in a Forest Service administrative unit. The administrative unit may consist of two or more national forests or all the forests within a state. The supervisor reports to the regional forester.

**forestwide standard** - A performance criterion in the Forest Land and Resource Management Plan indicating acceptable norms, specification, or quality that actions must meet to maintain the minimum considerations for a particular resource. This type of standard applies to all areas of the forest regardless of the other management prescriptions applied.

**free-to-grow** - A seedling or small tree free from direct competition from other trees, shrubs, grasses, or herbaceous plants.

**fuel break** - Any natural or constructed barrier used to segregate, stop, and control the spread of fire, or to provide a control line from which to work.

**fuel treatment** - The rearrangement or disposal of fuels to reduce fire hazard. Fuels are defined as living and dead vegetative materials consumable by fire.

**fuels management** - The planned treatment of fuels to achieve or maintain desired fuels conditions.

**fuelwood** - Wood used for conversion to some form of energy.

**future old growth** - Forest stands or patches allocated to old growth through land management decisions, but which do not meet one or more of the old growth criteria in the operational definitions. (*R8-FR 62 June 1997*)

**FWRBE Team** - A team of biologists chartered by the Southern Appalachian Planning Steering Team to ensure consistent treatment of common biological resource issues during revision of the Forest Plan. FWRBE (Fish, Wildlife, Range, Botany, and Ecology).

## **G**

**game species** - Any species of wildlife or fish for which seasons and bag limits have been prescribed, and which are normally harvested by hunters, trappers, and fishermen under state or federal laws, codes, and regulations.

**General Forest Area (GFA)** - National forest lands not categorized as developed recreation sites, trails or wilderness. It can be a logical working area, (i.e., a drainage, geographic area, forest district, etc.) Typically containing a wide spectrum of settings and opportunities, facilities and sites located inside the boundary of a GFA are sometimes considered *concentrated use areas* (CUA), that may include dispersed front- and/or backcountry campsites, parking areas, pullouts and landings, river and road corridors, lake surfaces, and day use areas including OHV areas, climbing areas, target shooting areas, etc. Amenities or constructed features inside GFAs are primarily for resource protection.

**geologic features** - Landforms or other features of significant geologic interest that may require special management to protect the special qualities, or provide interpretation to the public.

**geologic formation** - A mappable body of rock identified by distinctive characteristics, some degree of internal homogeneity, and stratigraphic position. The name normally consists of two parts. The first is the name of the geographic locality where the formation was first identified and described. This is followed by a descriptive geologic term, usually the dominant rock type.

**Geographic Information System (GIS)** - An information processing technology to input, store, manipulate, analyze, and display spatial resource data to support the decision-making processes of an organization. Generally, an electronic medium for processing map information, typically used with manual processes to affect specific decisions about land base and its resources.

**geological area** - A unit of land that has been designated by the Forest Service as containing outstanding formations or unique geological features of the earth's development, including caves and fossils. Areas of this type and all other special interest areas are identified and formally classified primarily because of their recreational and educational values. Areas with similar types of values of scientific importance are formally classified as research natural areas.

**global ranks** - A ranking system developed by the Nature Conservancy which ranks the relative imperilment, or conservation status, of plant and animal species on a global level.

**goal** - A concise statement that; (a) describes a desired condition to be achieved sometime in the future, (b) is broad and general, (c) has no specific date by which it is to be completed, and (d) forms the principal basis from which quantifiable and/or time-delimited objectives are developed. 36 CFR 219.3

**goods and services** - The various outputs, including on-site uses, produced from forest and rangeland resources. 36 CFR 219.3

**grassland** - Areas on which vegetation is dominated by grasses, grass-like plants, forbs, and/or cryptogams (mosses, lichens, and ferns), provided these areas do not qualify as built-up land or cultivated cropland. Examples include tall- and short-grass prairies, meadows, cordgrass marshes, sphagnum moss areas, pasturelands, and areas cut for hay.

**grazing** - Consumption of range or pasture forage by animals.

**grazing capacity** - The maximum stocking rate possible without inducing damage to vegetation or related resources.

**grazing permit** - Official, written permission to graze a specified number, kind, and class of livestock for a specific period on a defined range allotment.

**gross receipts** - A total of all funds received by the U.S. Treasury as a result of Forest Service activities.

**groundwater** - Water in a saturated zone in a geologic stratum. Water stored below the water table where the soil (or other geologic material) is saturated.

**group selection** – An uneven-aged regeneration method in which trees are removed periodically in small groups. Uneven age classes for trees are established in small groups. The width of groups is about twice the height of the mature trees, with small openings providing microenvironments suitable for tolerant regeneration, and the larger openings providing conditions suitable for more intolerant regeneration.

**growing stock trees** - Live trees, meeting specified standards of quality or vigor, included in growth and yield projections to arrive at the allowable sale quantity.

**growing stock volume** – Volume in cubic feet of solid wood in growing stock trees greater than or equal to 5.0 inches in diameter at breast height from a one foot high stump to a minimum 4.0 inch top diameter outside bark on the central stem. Volume of solid wood in primary forks from the point of occurrence to a minimum 4-inch top diameter outside bark is included. (*USDA Forest Service, 1988*)

## H

**habitat** - The native environment of an animal or plant.

**habitat generalist** – A species that is adaptable to a wide range of ecological conditions for survival, though it will exhibit lower populations in less than optimal conditions.

**hardwood** – Trees belonging to the botanical group *Angiospermae* and characterized by broad and net-veined leaves. (*adapted from SAF, 1998*)

**harvest cutting** - An intermediate or final cutting that extracts salable trees.

**harvesting method** - A procedure by which a stand is logged. Emphasis is on meeting logging requirements rather than silvicultural objectives.

**hazard** – The degree of vulnerability of a plant community, or an individual plant, to a specific pest once that pest is present. (*adapted from SAF, 1998*) See also 'susceptibility'.

**hazard rating** – A ranking produced by a hazard rating system of individuals or of communities according to the probability of damage or impact from one or more insects or diseases. (*adapted from SAF, 1998*)

**hazard rating system** – A procedure for logically, consistently, and correctly considering the variables that influence the risk of damage from a specific pest to a tree or stand and assigning a hazard rating.

**herbicide** - A pesticide used for killing, or controlling the growth of, undesirable plants.

**heritage sites/assets** - Remnants of past cultures that remind us of the centuries-old relationship between people and the land (from *National Heritage Strategy*); property, plant or equipment that are unique for one or more of the following reasons: (1)

historical or natural significance; (2) cultural, educational or artistic/aesthetic significance; or (3) significant architectural characteristics. (*Chpt 5*)

**high-grading** - The removal of the most commercially valuable trees, often leaving a residual stand composed of trees of poor condition or species composition.

**historic landscapes** - Remnants of past cultures that remind us of the centuries-old relationship between people and the land (from *National Heritage Strategy*); property, plant or equipment that are unique for one or more of the following reasons - (1) historical or natural significance; (2) cultural, educational or artistic/aesthetic significance; or (3) significant architectural characteristics.

**horizontal demand curve** - A relationship between the quantity of a good or service supplied to a market and its price in that market such that a greater or lesser supply does not affect the price. When plotted on a graph of the amount of a good or service the market will consume having price on the vertical axis and quantity (supply) on the horizontal axis, a straight level line results.

**host types** - Plant communities within which a pest species develops and obtains all or part of its food. (*adapted from SAF, 1998*)

**human resource programs** - Any of the federal labor programs providing work experience for local people.

**hydric soils** - Soils developed in conditions where soil oxygen is limited by the presence of saturated soil for long periods during the growing season.

**hydrologic unit (HU)** - A hydrologic subdivision of the United States identified in a hierarchical classification of hydrologic drainage basins. Each hydrologic unit is identified by a unique hydrologic unit code (HUC) consisting of two to twelve digits based on the four levels of classification in the hydrologic unit system. Two digits identify each level of classification, with the smallest units having greater number of digits. For Forest land management planning, fifth-level hydrologic units are the common unit used, with ten (10) digits identifying each HU. The collective set of digits used is called a hydrologic unit code, or HUC.



**immediate foreground** - The area in the landscape from the viewer out to 300 feet distance.

**improved pasture** - Fenced, fertilized pastures intensively managed for livestock grazing.

**improvement cutting** - The removal of less desirable trees in a stand of poles or larger trees, primarily to improve composition and quality.

**industrial fuelwood** - Wood to be used specifically by industry for production of energy.

**industrial wood** - All commercial round wood products, except fuelwood.

**infestation** - The attack by macroscopic organisms in considerable concentration. Examples are infestations of tree crowns by budworm, timber by termites, soil or other substrates by nematodes or weeds.

**INFRA (Infrastructure)** - An integrated Forest Service database for collection, storage, and use of information about features, land units, facilities and utilities, accessibility and real property. For recreation management, INFRA holds information on operation and maintenance costs, recreation funding shortfalls, recreation use data, information on accessibility, and inventories of facilities. INFRA uses Oracle, Arc Info and Arc View GIS technology, and supplements recreation management systems including SMS, ROS and Benefits Based Management.

**initial attack** - The aggressive response to a wildland fire based on values to be protected, benefits of response, and reasonable cost of response.

**in-stream flow** - The presence of adequate stream flow in channels necessary to maintain the integrity of the stream channel, and protection of downstream beneficial uses including fish and wildlife needs, outdoor recreation uses of water, and livestock watering needs.

**integrated pest management (IPM)** - The maintenance of destructive agents, including insects, at tolerable levels by the planned use of a variety of preventive, suppressive, or regulatory tactics and strategies that are ecologically and economically efficient and socially acceptable.

**Interdisciplinary Team (IDT)** - A group of resource specialists (e.g.: forester, wildlife biologist, hydrologist, etc.) responsible for developing the Forest Plan/Environmental Impact Statement, and for making recommendations to the forest supervisor.

**intermediate treatments** - A collective term for any treatment designed to enhance growth, quality, vigor, and composition of the stand after establishment of regeneration and prior to final harvest.

**intermittent streams** - Streams that flow in response to a seasonally-fluctuating water table in a well-defined channel. The channel will exhibit signs of annual scour, sediment transport, and other stream channel characteristics, absent perennial flows. Intermittent streams typically flow during times of elevated water table levels, and may be dry during significant periods of the year, depending on precipitation cycles.

**interpretive association** - A nonprofit, tax-exempt corporation or organization whose purpose is extending and enhancing the ability of the Forest Service to provide customer service to National Forest visitors. Interpretative associations work cooperatively with the Forest Service in educating the public about natural and cultural issues on public lands.



**interpretive services** - Visitor information services designed to present inspirational, educational, and recreational values to forest visitors in an effort to promote understanding, appreciation, and enjoyment of their forest experience.

**intolerant** – A plant requiring sunlight and exposure for establishment and growth.

**invasive** – A species that establishes easily and spreads rapidly; especially if it does so to the detriment of other species associated with the same ecological conditions.

**irregular shelterwood** – A modified form of the shelterwood regeneration method in which no removal cut occurs and the residual trees are left in place indefinitely to accomplish purposes other than regeneration.

## K

**KCFast** - Kansas City Fire Access Software. KCFast is a web-based computer application that simplifies data retrieval from NIFMID (National Interagency Fire Management Integrated Database). KCFast builds the JCL (Job Control Language) required to query NIFMID for fire and weather data.

## L

**land exchange** - The conveyance of non-federal land or interests in the land in exchange for National Forest System land or interests in land.

**landing** - A cleared area in the forest to which logs are yarded or skidded for loading onto trucks for transport.

**landline location** - Legal identification and accurate location of national forest property boundaries.

**land management planning** - A formal process of management planning involving four interactive steps: monitoring, assessment, decision making, and implementation as described in the Federal Code of Regulations.

**landscape** - An area composed of interacting ecosystems that are repeated because of geology, land form, soils, climate, biota, and human influences across a defined area irrespective of ownership or other artificial boundaries. Landscapes are generally of a size, shape, and pattern that are determined by interacting ecosystems.

**landscape character** - Particular attributes, qualities, and traits of a landscape that give it an image and make it identifiable or unique. See also “desired landscape character.”

**land type** - An intermediate level in the ecological classification system based on landform, natural vegetative communities, and soils.

**land type association** - A group of landtypes. The landtypes in the association are sufficiently homogeneous to be considered as a whole for modeling the future outputs and effects of planned management activities. Landtype associations may not follow watershed boundaries, and are defined on the basis of general similarities in climate, geology, landform, and vegetation.

**land type phase** - Subdivisions of landtypes based on topographic criteria (for example, slope-shape or aspect), hydrologic characteristics, soils and plant associations and phases that influence or reflect the microclimate and productivity of a site.

**large woody debris** - Any large piece of relatively stable woody material with a diameter greater than 10 centimeter and longer than 1 meter that intrudes into or is contained within the stream channel.

**late-seral (successional) stage** - The stage of forest development at which overstory trees have attained most of expected height growth and have reached ecological maturity. As used in the Environmental Impact Statement and Plan, a stand age of greater than 80 years is generally used to define this condition. Old-growth forests occur during the later periods of this seral stage at ages that vary by forest type and in response to a variety of environmental conditions. See 'successional stage.'

**lease** - A contract between the landowner and another granting the latter the right to search for and produce oil, gas, or other mineral substances (as specified in the document) on payment of an agreed rental, bonus, or royalty. This right is subject to the terms, conditions, and limitations specified in the document.

**leave tree** - A tree (marked to be) left standing for wildlife, seed production, etc, in an area where it might otherwise be felled.

**Limits Of Acceptable Change (LAC)** - A nine step planning process used to establish acceptable wilderness resource and social conditions and prescribe appropriate management actions.

**logging** - The felling, skidding, on-site processing, and loading of trees or logs onto trucks.

**long-term facilities** - Facilities that are developed and operated for long-term land management and resource utilization needs. They may be operated for constant or intermittent service.

**constant service** - Facilities developed and operated for continuous or annual recurrent service.

**intermittent service** - Facilities developed and operated for periodic service and closed for more than one year between periods of use. Closure is by means other than a gate.

**long-term sustained-yield capacity** - The highest uniform wood yield from lands being managed for timber production that may be sustained under a specified management intensity, consistent with multiple-use objectives.

**low PSI skidder** - A term used to identify any one of several types of vehicles used to move logs from stump to log loading area. Low PSI (pounds per square inch) identifies those vehicles that, because of design of tracks, wheels, or suspension system, exert much lower pressure on ground surface than other types of ground-based skidding vehicles.

## **M**

**manage** - A term with many meanings that in Forest Service use includes all of the following: (1) to handle or direct with a degree of skill, (2) to treat with care, (3) to exercise executive, administrative, or supervisory direction of, (4) to alter by manipulation, (5) to succeed in accomplishing, or (6) to achieve one's purpose. (*Webster's Ninth New Collegiate Dictionary, 1984*)

**management** - The act or art of managing. See 'manage'.

**management action** - A set of management activities applied to a land area to produce a desired output.

**management action controls** - Specifies the acreage or the proportion of an analysis unit assigned to a set of management actions. The controls can be specified in terms of greater than or equal to, equal to, or less than equal to some amount, or proportion of the analysis unit acreage.

**management area** - A selected grouping of capability or analysis areas selected through evaluation procedures used to locate decisions, and resolve issues and concerns.

**Management Attainment Report (MAR)** - A process used in determining whether work is progressing as planned. It provides the manager with information for measuring progress against objectives, information for measuring self and subordinates' performance, and an indication of a reporting unit's performance.

**management concern** - An issue, problem, or condition which constrains the range of management practices identified by the Forest Service in the planning process.

**management direction** - A statement of multiple-use and other goals and objectives, the associated management prescriptions, and standards and guidelines for attaining them.

**management emphasis** - The multiple-use values to be featured or enhanced.

**management indicator species (MIS)** - An animal or plant selected for use as a planning tool in accordance with 1982 NFMA regulations (36 CFR 219.19). These species are used to help set objectives, analyze effects of alternatives, and monitor

plan implementation. They are chosen because their population changes are believed to indicate the effects of management on selected biological components.

**management intensity** - A management practice or combination of management practices and associated costs designed to obtain different levels of goods and services.

**management opportunity** - A statement of general actions, measures, or treatments that address a public issue or management concern in a favorable way.

**management practice** - A specific action, measure, course of action, or treatment undertaken on a forest.

**management prescription** - Management practices and intensity selected and scheduled for application on a specific area to attain multiple-use and other goals and objectives.

**management situation** - A comprehensive statement of the planning area resources, its history as it may influence planning, past and present uses, and a review of the public issues directly concerned with the area.

**management team** - A decision-making group consisting of the forest supervisor, staff officers, and district rangers. Also referred to as the leadership team.

**management type** - A Forest Service-specific term for: 1) a data field in the vegetation community database; and 2) the replacement vegetation community most appropriate for that location based on ecological conditions and forest plan objectives. The management type may or may not be the same as the existing vegetation community.

**market area** - A term used in the 'Forest Products' topic of the EIS for the geographic area within a polygon defined on a map by connecting with a straight line the locations of just those mills on the periphery of a plot of all mills that bought either Chattahoochee or Oconee National Forest timber in the period 1987-95.

**mast** - The fruit of trees considered as food for livestock and certain kinds of wildlife. Hard mast is the fruits or nuts of trees such as oak, beech, walnut, and hickories; soft mast includes the fruits and berries from plants such as dogwood, viburnum elderberry, huckleberry, grape, blueberry, and blackberry.

**mast tree** - Generally hardwood trees of the heavy seeded variety including oaks, hickories, walnut, and beech 25 years and older, capable of producing frequent seed crops to feed a variety of wildlife species.

**mature timber** - The stage at which a crop or stand of trees best fulfills the main purpose for which it was grown.

**maximum modification** - A visual quality objective in which human activities may dominate the characteristic landscape, but should appear as a natural occurrence when viewed as background.

**mean annual increment of growth** - The total increase in girth, diameter, basal area, height, or volume of individual trees, or a stand, up to a given age divided by that age.

**Meaningful Measures** - A label for the Forest Service's National Recreation Business Management System, MM is a six-step management system for professional, accountable and visitor-responsive site and project-level management. Accomplishment is measured by established standards of quality for recreation services. The system determines costs to attain those standards, sets priorities for work to be accomplished and budget allocations, and measures the actual success at attaining these quality standards. (*MM User Guide 2000/infra 97*)

**mechanical site preparation** - Soil disturbance by mechanical chopping, furrowing, dozing, or disking to prepare areas for reforestation. Objective is to reduce plant competition for trees to be planted.

**mechanical transport** - Any contrivance for moving people or material in or over land, water, or air, having moving parts, that provides a mechanical advantage to the user, and that is powered by a living or non-living power source. This includes but is not limited to, sailboats, hang gliders, parachutes, bicycles, game carriers, carts, and wagons. It does not include wheelchairs when used as necessary medical appliances. It also does not include skis, snowshoes, rafts, canoes, sleds, travois, or similar primitive devices without moving parts.

**merchantable** - Trees having a combination of characteristics such that there is an economic demand for them in the wood-using industry sector.

**mesic** - Sites or habitats characterized ecologically by intermediate moisture conditions, i.e., neither decidedly wet or dry.

**middle ground** - The space between the foreground and the background in a picture or landscape, generally one-half mile to four miles distance from the viewer.

**mid-seral (successional) stage** - The stage of forest development during which distinct overstory, midstory, and understory canopies are developed. As used in the Environmental Impact Statement and Plan, a stand age of 11 to 40 years is generally used to define this condition. See 'successional stage.'

**midstory** - Those stems with an height intermediate between the overstory and the understory in community with a multi-layered structure of canopies. See 'overstory' and 'understory'.

**midstory reduction** - The removal of some or all of the mid-story in a community, usually for the purpose of creating or maintaining wildlife habitat.

**mineral exploration** - The search for valuable minerals on lands open to mineral entry.

**mineral soil** - Weathered rock materials without any vegetative cover.

**mineral resource** - A known or undiscovered concentration of naturally occurring solid, liquid, or gaseous material in or on the earth's crust in such form and amount that economic extraction of a commodity from the concentration is currently or potentially feasible.

**minerals (leasable)** - Coal, oil, gas, phosphate, sodium, potassium, oil shale, sulphur, and geothermal steam. All hard-rock minerals that occur on acquired lands, as opposed to public domain lands, are leasable.

**minerals (locatable)** - Those hardrock minerals which are mined and processed for the recovery of metals. Locatable minerals may include any solid, natural inorganic substance occurring in the crust of the earth, except for the common varieties of mineral materials and leasable minerals.

**minerals (salable)** - Common variety deposits that—although they may have value or use in trade, manufacture, the sciences, or in the mechanical or ornamental arts—do not possess a distinct, special economic value for such use over and above the normal uses of the general sum of such deposits. These may include sand, stone, gravel, pumicite, cinders, pumice (except that occurring in pieces more than two inches on a side), clay, and petrified wood.

**minimum management requirement** - Any constraint imposed to comply with 36 *CFR 219.27* and other legal restrictions that must be met by benchmark solutions as noted in 36 *CFR 219.11(e)(1)*. These include requirements such as: conserving soil productivity, maintaining minimum viable populations of wildlife, preserving the habitat of endangered species, dispersing openings, and limiting cut size. It also includes any other standards and guidelines, including best management practices that serve to define management prescriptions and resource response.

**mitigation** - Actions to avoid, minimize, reduce, eliminate, or rectify the impact of a management practice.

**mitigation banking** - A site where lands and/or other resources are restored, enhanced, or in exceptional circumstances, preserved or created expressly for the purpose of providing compensatory mitigation in advance of authorized impacts to similar resources.

**mixed mesophytic** - A term for a group of forest communities each of which typically: (1) has a diverse mix of species, (2) occurs on non-riparian sites that have a cooler and more moist microclimate than other non-riparian communities within the same landscape, and (3) has high or very high productivity.

**modification** - A visual quality objective in which human activities may dominate the characteristic landscape but must, at the same time, use naturally established form, line, color, and texture appearing as a natural occurrence when viewed in foreground or middle ground.

**monitoring** - The periodic evaluation on a sample basis of Forest Plan management practices to determine how fully objectives have been met, and how closely management standards have been applied.

**montane** - Relating to the zone of relatively moist, cool, upland slopes below timberline dominated by large evergreen trees.

**mortality** - Dead or dying trees resulting from forest fire, insect, diseases, or climatic factors.

**motorized equipment** - Machines that use a motor, engine, or other non-living power source. This includes, but is not limited to such machines as chain saws, aircraft, snowmobiles, generators, motor boats, and motor vehicles. It does not include small battery or gas powered hand-carried devices such as shavers, wristwatches, flashlights, cameras, stoves, or other similar small equipment.

**multiple use** - The management of all the various renewable surface resources of the National Forest System so that they are used in a manner that will best meet the needs of the American people. Making the most judicious use of the land for these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in the use to conform to changing needs and conditions.

**multipliers** - The ratio of a total impact to a component of the impact in input/output analysis. An example would be the ratio of the sum of direct, indirect, and induced impacts to direct impacts.

## **N**

**National Forest Land and Resource Management Plan (Forest Plan)** - A plan developed to meet the requirements of the Forest and Rangeland Renewable Resources Planning Act of 1974, as amended, that guides all natural resource management activities and establishes management standards and guidelines for the National Forest System lands of a given national forest.

**National Forest System (NFS)** - All national forest lands reserved or withdrawn from public domain of the United States and acquired through purchase, exchange, donation, or other means. National Grasslands and land utilization projects administered under Title III of the Bankhead-Jones Farm Tenant Act (*50 Stat. 525, 7 U.S.C. 1010-1012*), and other lands, waters, or interests that are administered by the Forest Service, or are designated for administration through the Forest Service as a part of the system.

**National Forest System Land** - Federal land that has been legally designated as national forests or purchase units, and other land under the administration of the Forest Service, including experimental areas and Bankhead-Jones Title III land.

**National Recreation Trails** - Trails designated by the Secretary of the Interior or the Secretary of Agriculture as part of the national system of trails authorized by the

National Trails System Act. National recreation trails provide a variety of outdoor recreation uses, in or reasonably accessible, to urban areas.

**National Register of Historic Places** - The Nation's official list of cultural resources worthy of preservation. Authorized under the National Historic Preservation Act of 1966, the National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect our historic and archeological resources. Properties listed in the Register include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture. The National Register is administered by the National Park Service, which is part of the U.S. Department of the Interior.

**National Visitor Use Monitoring (NVUM)** - A systematic process to estimate annual recreation and other uses of National Forest lands through user surveys.

**National Wild and Scenic Rivers System** - Rivers with outstanding scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values designated by Congress under the Wild and Scenic Rivers Act of Oct. 2, 1968, for preservation of their free-flowing condition.

**National Wilderness Preservation System** - All lands covered by the Wilderness Act and subsequent wilderness designations, irrespective of the department or agency having jurisdiction.

**natural regeneration** - An age class created from natural seeding, sprouting, suckering, or layering.

**net annual growth** - The net change in merchantable volume expressed as an annual average between surveys in the absence of cutting (gross growth minus mortality).

**net public benefits** - An expression used to signify the overall long-term value to the nation of all outputs and positive effects (benefits) less all associated inputs and negative effects (costs), whether or not they can be quantitatively valued. Net public benefits are measured by quantitative and qualitative criteria rather than a single measure or index. The maximization of net public benefits to be derived from management of units of the National Forest System is consistent with the principles of multiple use and sustained yield.

**no-action alternative** - The most likely condition expected to exist in the future if current management direction continued unchanged.

**non-chargeable volume** - All volume not included in the growth and yield projections for the selected management prescriptions used to arrive at the allowable sale quantity.

**non-commercial** - An activity that fells or removes trees of a size and quality that could be used by wood industry, but are not offered for sale either because a sale is economically infeasible or as a management choice.



**non-commodity output** - A resource output that cannot be bought and sold.

**non-declining even flow** - See 'non-declining yield'.

**non-declining yield** - A level of timber production planned so that the planned sale and harvest for any future decade is equal to, or greater than the planned sale and harvest for the preceding decade.

**non-forest land** - Land that has never supported forests, and lands formerly forested where use for timber growth is precluded by development for other use. Lands that never have had, or that are incapable of having 10 percent or more of the area occupied by forest trees; or lands previously having such cover and currently developed for non-forest use.

**non-game species** - Any species of wildlife or fish which is ordinarily not managed or otherwise controlled by hunting, fishing, or trapping regulations. The designation may vary by state

**Nonnative invasive** - A plant or animal species with all of the following characteristics: (a) not naturally occurring within the plan area; that is, required human intervention to originally establish, (b) physical and biological environmental factors typically ineffective at preventing establishment or slowing spread once established, (c) one or more effective transport mechanisms, and (d) establishment and growth occurring to the detriment of native species, typically by pre-empting their habitat niche.

**non-point source pollution** - A diffuse source of pollution not regulated as a point source. May include atmospheric deposition, agricultural runoff, and sediment from land-disturbing activities.

**non-stocked stands** - Stands less than 16.7 percent stocked with growing stock trees.

**non-timber forest products** - All forest products except timber, including resins, oils, leaves, bark, plants other than trees, fungi, and animals or animal products.

## **O**

**objective** - A concise, time-specific statement of measurable planned results that respond to pre-established goals. It forms the basis for further planning to define the precise steps to be taken and the resources to be used in achieving identified goals.

**obligate** - A species that is limited in its habitat to a few specific environmental conditions. (SAF, 1998)

**off-highway vehicle (OHV)** - Any vehicle capable of being operated off established roads; e.g., motorbikes, four-wheel drives, and snowmobiles.

**off-road vehicle (ORV)** - Any motorized vehicle designed for or capable of cross county travel on or immediately over land, water, sand, snow, ice, marsh, swampland, or

other natural terrain; except that term excludes (a) any registered motorboat, (b) any fire, military, emergency or law enforcement vehicle when used for emergency purposes, and any combat or combat support vehicle when used for national defense purposes, and (c) any vehicle whose use is expressly authorized by the respective agency head under a permit, lease, license, or contract. (FSM 235)

**off-site species** – Plant species growing on a site with conditions under which they would not naturally occur. (See ‘on-site species.’)

**off-stream use** – Water withdrawn or diverted from a ground or surface-water source for public water supply, industry, irrigation, livestock, thermoelectric power generation, and other uses.

**old growth** – Forested ecosystems distinguished by old trees and some combination of the following characteristics: (1) large trees for the species and site, (2) wide variation in tree sizes and spacing, (3) accumulations of large-sized dead standing and fallen trees that are high relative to earlier stages of the same community, (4) decadence in the form of broken or deformed tops or boles and root decay, (5) multiple canopy layers, and (6) canopy gaps and understory patchiness. (R8-FR 62 June 1997)

**old growth-compatible prescription** – A term introduced by the effects writer in the Chattahoochee-Oconee NF Plan EIS for those management prescriptions that do not have quantified and time-delimited vegetation objectives that would conflict with old growth characteristics, but were not created with the primary intent of providing old growth. An example is Wilderness.

**old growth forests** - An ecosystem distinguished by old trees and related structural attributes. Old growth encompasses the later stages of stand development that typically differ from earlier stages in a variety of characteristics including tree size, accumulation of large dead woody material, number of canopy layers, species composition, and ecosystem function. Old growth is not necessarily virgin or primeval. It can develop over time following human disturbances, just as it does following natural disturbances. Old growth encompasses older forests dominated by early seral species, and forests in later successional stages dominated by shade tolerant species.

**on-site species** - A term referring to species normally found on a site under natural conditions. (See ‘off-site species.’)

**operating plan** - A written plan, prepared by those engaged in mining activity on the forests, and approved by a forest officer for prospecting, exploration, or extraction activities that are slated to take place on National Forest System land.

**optimality** - As used in the Plan and EIS, means ‘A requirement of the National Forest Management Act for a finding that the use of clearcutting is the optimal; that is, most desirable, harvest method to meet the Forest Plan for the location where it is being used.’ *Paraphrased from 36 CFR 219.*

**ordinary high water mark** - The line on the shore established by the fluctuation of water, and is indicated by physical characteristics including a clear, natural line impressed on the bank; shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter, debris, or other appropriate means that consider the characteristics of the surrounding area.

**output** - The goods, end products, or services that are purchased, consumed, or used directly by people. Goods, services, products, and concerns produced by activities that are measurable and capable of being used to determine the effectiveness of programs and activities in meeting objectives. A broad term for describing any result, product, or service that a process or activity actually produces.

**output, minimum level** - The amount of an output that will occur regardless of management activity.

**outstanding mineral rights** - Instances in which the minerals in federally- owned lands were severed prior to the transaction in which government acquired the land. Such rights are not subject to the Secretary of Agriculture's rules and regulations. Removal or extraction of these minerals must be allowed in accordance with the instrument severing the minerals from the surface and under applicable state and local laws and regulations.

**overnight use developed sites (OUDS)** - National Forest sites with facilities for overnight use, including campgrounds, cabins, fire lookouts, lodges, horse camps, etc. Recreation residences are not included in this definition.

**over-stocking** - The condition of having so many stems for a species and size that severe competition for growth resources has reduced growth, stressed trees, and put them at risk for insect, disease, or wildfire mortality.

**overstory** - That portion of trees in a two- or multi-layered forest stand that provides the upper crown cover.

**overstory removal** - The cutting of trees comprising an upper canopy layer in order to release trees or other vegetation in an understory.

**overtopped (suppressed)** - A tree whose crown is completely overtopped by (that is, underneath) the crowns of one or more neighboring trees. Typically used only for those species intermediate in shade tolerance or intolerant and capable of forming a high canopy in more favorable growing conditions as opposed to those that are shade tolerant or are not capable of forming a high canopy. The latter are usually classed as 'understory.'

**P**

**PM2.5** - fine particulate matter, an important air pollutant; a subset of total particulate matter having a diameter less than or equal to 2.5 microns.

**PM10** – small particulate matter, an important air pollutant; a subset of total particulate matter having a diameter less than or equal to 10 microns

**partial retention** - A visual quality objective which in human activities may be evident, but must remain subordinate to the characteristic landscape.

**particulate matter (PM)** – (total) important air pollutant; includes coarse particulates PM10 and PM2.5

**partnership** - Voluntary, mutually beneficial and desired arrangement between the Forest Service and another, or others, to accomplish mutually agreed-on objectives consistent with the agency's mission and serving the public's interest.

**pathogen** – A parasitic organism directly capable of causing disease. (SAF,1998)

**payments in lieu of taxes** - Payments to local or state governments based on ownership of federal land, and not directly dependent on production of outputs or receipt sharing.

**per capita use** - The average amount of water used person during a standard time period, generally per day.

**perennial stream** - Any watercourse that generally flows most of the year in a well-defined channel and is below the water table. Droughts and other precipitation patterns may influence the actual duration of flow. It contains fish or aquatic insects that have larvae with multi-year life cycles. Water-dependent vegetation is typically associated with perennial streams.

**person-year** - About 2,000 working hours that may be filled by one person working during the course of one year or several people working a total of 2,000 hours.

**persons-at-one-time (PAOT)** - a measure of recreation carrying capacity, especially for developed sites. National conventions include 5 persons per family picnic/camp unit, 3.5 persons per parking lot stall at a trailhead or visitor center, 1.5 persons per motorcycle parking stall and 40 persons per tour bus parking stall. (*Infra* 97)

**pest** – 1) an organism that is undesirable because it is detrimental to the interests of humans, 2) an organism capable of causing injury or damage. (SAF,1998)

**petrographic** – The description and systematic classification of rocks.

**photosynthesis**– The manufacture of organic compounds, particularly carbohydrates, under favorable temperature and moisture conditions within the chlorophyll cells of plants from carbon dioxide, water, and enzymes using a portion of visible light as the energy source.

**physiographic region** - A region of similar geologic structure and climate that has had a unified geomorphic history.

**physiologically mature** – A descriptive term for a life stage of an organism in which its chemical and biological processes have become those of full development.

**pioneer species** – Any new arrival in the early stages of succession, with particular reference to certain species whose presence appears to promote the establishment of more exacting species. (SAF,1998)

**planning area** - The area of the National Forest System covered by a regional guide or forest plan.

**planning criteria** - Standards, tests, rules, and guidelines by which the planning process is conducted, and upon which judgments and decisions are based.

**planning horizon** - The overall time period considered in the planning process that spans all activities covered in the analysis or plan. All future conditions and effects of proposed actions which would influence the planning decisions.

**planning period** - The time interval within the planning horizon that is used to show projected incremental changes in yields, costs, effects, and benefits – frequently in decades, up to five decades.

**plastic soil** - A soil capable of being molded or deformed continuously and permanently, by relatively moderate pressure, into various shapes.

**pole timber** – 1) A tree community life stage characterized by the dominant and co-dominant crown class trees having a diameter at breast height between 5.0 inches and the minimum sawtimber-size diameter at breast height, or 2) a timber product having a diameter in that range.

**polygon** - In a GIS application, a two-dimensional feature representing an area such as a state or county.

**possible old growth** – Forest stands identified during the preliminary inventory of old growth because they meet one or more of the preliminary inventory criteria. (R8-FR 62 June 1997)

**pre-commercial thinning** - The selective felling, deadening, or removal of tree in a young stand not for immediate financial return, but primarily to accelerate diameter increment on the remaining stems. To maintain a specific stocking or stand density range, or to improve the vigor and quality of the remaining trees.

**prescribed fire** – Any fire ignited by management actions to meet specific objectives including disposal of fuels, and controlling unwanted vegetation. The fires are conducted in accordance with prescribed fire plans, and are also designed to stimulate grasses, forbs, shrubs, or trees for range, wildlife, recreation, or timber management purposes.

**present net value** - The difference between the discounted value (benefits) of all outputs to which monetary values or established market prices are assigned and the total discounted costs of managing the planning area.

**preservation** - A visual quality objective that provides for ecological change only.

**presuppression** - Activities required in advance of fire occurrence to ensure effective suppression action, including: (1) recruiting and training fire forces, (2) planning and organizing attack methods, (3) procuring and maintaining fire equipment, and (4) maintaining structural improvements necessary for the fire program.

**prevention of significant deterioration (PSD)** - a Clean Air Act program which allocates areas into one of three classes. These classes are described in the EIS text.

**primary trout stream** - Streams that contain naturally-reproducing populations of brook, rainbow, and/or brown trout.

**primary wood processors** - Those wood-using industries that receive their raw material as round, bark-covered portions of tree boles.

**process records** - A system that records decisions and activities that result from the process of developing a forest plan, revision, or significant amendment.

**proclamation boundary** - The boundary contained within the presidential proclamation that established a particular national forest.

**productive deferred** - Productive (capable) forest land which has been legislatively designated or administratively designated by the Secretary of Agriculture or Chief of the Forest Service for wilderness study or possible additions to the Wilderness System. This classification includes RARE II area designated as wilderness, but does not include RARE II areas designated as "further planning."

**productivity class** - A classification of the capacity of a given piece of land for timber growth is expressed in cubic feet per acre a year.

**Class I** - Lands capable of producing 120 cubic feet or more per acre a year.

**Class II** - Lands capable of producing 85 to 119 cubic feet per acre a year.

**Class III** - Lands capable of producing 50 to 84 cubic feet per acre a year.

**Class IV** - Lands capable of producing 20 to 49 cubic feet per acre a year.

**program** - Sets of activities or projects with specific objectives, defined in terms of specific results and responsibilities for accomplishments.

**program budget** - The schedule of projects and activities to be carried out on the forest for a year for which funds have been appropriated.

**program development and budgeting** - The process by which activities for the forest are proposed and funded.

**project** - A work schedule prescribed for a project area to accomplish management prescriptions. An organized effort to achieve an objective identified by location, activities, outputs, effects, time period, and responsibilities for execution.

**proposed action** - In terms of the National Environmental Policy Act, the project, activity, or decision that a federal agency intends to implement or undertake. The proposed action described in the Environmental Impact Statement is the Forest Plan.

**proposed wilderness** - Areas recommended for wilderness by the Forest Service as a result of the RARE II study, but which have yet to be acted on by Congress.

**prospecting permit** - A written instrument or contract between the landowner and another conveying to the latter the right to enter the former's property and search for mineral materials. Two types of permits are used: (1) a BLM Prospecting Permit is issued by the Bureau of Land Management upon recommendation of the Forest Service. In most cases, these are preference right permits in which the prospector has the first opportunity, to the exclusion of all others, to lease any minerals discovered, and (2) a Forest Service Prospecting Permit issued by the Forest Service. No preference rights are conveyed under Forest Service permits, except in some cases of common varieties on acquired lands.

**province** - An ecological unit in the ecoregion planning and analysis scale of the National Hierarchical Framework corresponding to subdivisions of a Division that conform to climatic subzones controlled mainly by continental weather patterns.

**proxy site** - A developed recreation site for which a parking or user fee is charged.

**public domain land** - Original holdings of the United States that were never granted or conveyed to other jurisdictions or reacquired by exchange for other public domain lands.

**public issue** - A subject or question of widespread public interest relating to management of the National Forest System.

**public participation activities** - Meetings, conferences, seminars, workshops, tours, written comments, survey questionnaires, and similar activities designed or held to obtain comments from the general public and specific publics.

**public supply** - Water withdrawn by public and private water suppliers and delivered to users.

**pulpwood** - Wood cut and prepared primarily for manufacture into wood pulp.

**pure stand** - A stand composed of essentially a single tree species, conventionally at least 85 percent based on numbers, basal areas, or volumes.

## Q

**qualifiers** - Measurable characteristics of outputs and activities. They characterize properties or attributes of activities or outputs.

**R**

**range allotment** - A designated area of land available for livestock grazing upon which a specified number and kind of livestock may be grazed under a special permit.

**range management** - The art and science of planning and directing range use to obtain sustained maximum animal production, consistent with perpetuation of the natural resources. Two types of range management are:

**extensive** - To control livestock numbers within present capacity of the range, but little or no attempt is made to achieve uniform distribution of livestock. Range management investments are minimal and only to the extent needed to maintain stewardship of the range in the presence of grazing. Past resource damage is corrected and resources are protected from natural catastrophes.

**intensive** - To maintain full plant vigor and to achieve full livestock utilization of available forage. This goal is achieved through implementation of improved grazing systems and construction and installation of range improvements. Cultural practices, (seeding and fertilizing), to improve forage quality and quantity may be used.

**ranger district** - Administrative subdivisions of the National Forest supervised by a District Ranger who reports to the Forest Supervisor.

**rare species** - Any native or once-native species of wild animal or plant which exists in small numbers at the scale being considered, and has been determined to need monitoring. May include species at the limits of their range..

**real dollar value** - A monetary value which compensates for the effects of inflation.

**receipt shares** - The portion of receipts derived from Forest Service resource management that is distributed to state and county governments, including the Forest Service, 25 percent fund payments.

**Record of Decision (ROD)** - A document separate from, but associated with an environmental impact statement that publicly and officially discloses the responsible official's decision on the alternative assessed in the environmental impact statement which is chosen for implementation.

**recreation** - Leisure time activity including swimming, picnicking, camping, boating, hiking, hunting, and fishing.

**recreation capacity** - A measure of the number of people a site can reasonably accommodate at one time; sometimes measured as PAOT or RVDs

**Recreation Information Management (RIM)** - A computerized system for gathering and storing national forest recreation information for purposes of resource planning, management, and research.



**Recreation Opportunity Spectrum (ROS)** - A method for classifying types of recreation experiences available or for specifying recreation experience objectives desired in certain areas. Classes are: Primitive, Semi-Primitive Non-Motorized, Semi-Primitive Motorized, Roaded Natural, Rural, and Urban.

**Primitive ROS** - An area characterized by having essentially unmodified natural environment of fairly large size. Interaction between users is very low and evidence of other users is minimal. The area is managed to be essentially free from evidence of human-induced restrictions and controls. Motorized use within the area is not permitted.

The recreation experience opportunity level provided would be characterized by the extremely high probability of experiencing isolation from the sights and sounds of humans, independence, closeness to nature, tranquility, and self-reliance through the application of woodsmen and outdoor skills in an environment that offers a high degree of challenge and risk.

**Semi-Primitive Non-Motorized ROS (SPNM)** - An area characterized by a predominantly natural or natural-appearing environment of moderate-to-large size. Interaction between users (or concentration of users) is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but are subtle.

The recreation experience opportunity level provided would be characterized by the high, but not extremely high (or moderate) probability of experiencing isolation from the sights and sounds of humans, independence, closeness to nature, tranquility, and self-reliance through the application of woodsmen and outdoor skills in an environment that offers challenge and risk (the opportunity to have a high degree of interaction with the natural environment). Motorized use is not permitted.

**Semi-Primitive Motorized ROS (SPM)** - An area characterized by a predominantly natural or natural-appearing environment of moderate-to-large size. Interaction between users (or concentration of users) is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present but are subtle.

The recreation experience opportunity level provided would be characterized by a high (but not extremely high) or moderate probability of experiencing isolation from the sights and sounds of humans, independence, closeness to nature, tranquility, and self-reliance through the application of woodsmen and outdoor skills in an environment that offers challenge and risk. Motorized use is permitted.

**Roaded Natural ROS (RN)** - An area characterized by predominantly natural-appearing environments with moderate evidences of the sights and sounds of man. Such evidences usually harmonize with the natural environment.

Interaction between users may be low to moderate, but with evidence of other users prevalent. Resource modification and utilization practices are evident, but harmonize with the natural environment. Conventional motorized use is provided for in construction standards and design of facilities.

The recreation opportunity experience level provided would be characterized by the equal probability for experiencing affiliation with individuals and groups and for isolation from sights and sounds of humans. Opportunities for both motorized and non-motorized forms of recreation may be provided.

**RN1** - A sub classification of Roaded Natural settings and are located within a half mile of an open road. These settings include the majority of developed recreation sites such as campgrounds, picnic areas and river access points. RN1 also accounts for undeveloped, but highly roaded settings popular for dispersed recreation activities such as hunting, fishing, camping and horseback riding. Interaction between users is moderate, but with evidence of other users prevalent. Opportunities for motorized forms of recreation may predominate.

**RN2** - A sub classification of Roaded Natural and accounts for areas on the National Forest that either buffer SPNM areas or stand alone as tracts of land 1,500 acres or larger with a low road density of 1.5 miles of road/1,000 acres. Inventoried RN2 areas are managed to provide additional semi-primitive recreation settings either motorized or non-motorized. Interaction between users may is low, but with evidence of other users prevalent.

**Rural ROS** - A classification for areas characterized by a substantially modified natural environment. Resource modification and utilization practices are to enhance specific recreation activities and to maintain vegetative cover and soil, but harmonize with the natural environment. A considerable number of facilities are designed for use by a large number of people. Moderate densities are provided away from developed sites. Facilities for intensified motorized use and parking are provided.

The recreation opportunity experience level provided would be characterized by the high probability for experiencing affiliation with individuals and groups, as well as the convenience of sites and opportunities. These factors are generally more important than the setting. Opportunities for wildland challenge, risk taking, and testing of outdoor skills are generally unimportant

**Urban ROS** - An area characterized by a substantially urbanized environment, although the background may have natural-appearing elements. Renewable resources modification and utilization practices are to enhance specific recreation activities. Vegetative cover is often exotic and manicured. Sights and sound of humans on-site are predominant. Large numbers of users can be expected, both on-site and in nearby areas. Facilities for highly intensified motor

use and parking are available with forms of mass transit often available to carry people throughout the site.

The recreation opportunity experience level provided would be characterized by the high probability for experiencing affiliation with individuals and groups, as well as the convenience of sites and opportunities. Experiencing natural environments, having challenges and risk afforded by the natural environment, and the use of outdoor skills are relatively unimportant. Opportunities for competitive and spectator sports and for passive uses of highly human-influenced parks and open spaces are common.

**recreation residence** - A privately owned residence located on National Forest lands through special use authorization.

**recreation visit** - The entry of one person upon a National Forest to participate in recreation activities for an unspecified period of time. A recreation visit can be composed of multiple site visits.

**recreation visitor day (RVD)** - Recreational use of National Forest sites, or areas of land or water, that aggregates 12 visitor-hours; may consist of one person for 12 hours, 12 persons for one hour, or any equivalent combination of continuous or intermittent recreation use by individuals or groups. This was the basic use-reporting unit in the recreation information management (RIM) system. (*Infra 97*)

**recruitment** - 1) regeneration, including reproduction in the animal world, 2) the additional trees moving into the next height, diameter, or age class over time. (*adapted from SAF, 1998*)

**red oak group** - A subset of oak species characterized by bristle-tipped lobes on the leaves, delayed germination of the acorns, and open pores in the wood.

**reforestation** - The re-establishment of forest cover by seeding, planting, and natural means.

**regeneration** - The act of renewing of a tree crop by establishing young trees by natural or artificial means. Also refers to the young crop itself.

**regeneration cutting** - Any removal of trees intended to assist regeneration already present or to make regeneration possible.

**regeneration harvest** - Any timber harvest carried out with the intent to establish new seedlings or sprouts for the purpose of replacing the original stand with a new forest.

**regeneration (reproduction) method** - A cutting procedure by which a new age class is created. The major methods are clearcutting, seed-tree, shelterwood, selection, and coppice.

**regeneration (reproduction) period** - The time between the initial regeneration cutting and the successful re-establishment of a new age class by natural means, planting, or direct seeding.

**Region 8** - The states that make up the Southern Region of the USDA Forest Service.

**Regional Forester** - The official responsible for management of National Forest land within a USDA Forest Service region.

**regulated harvest** - Includes any volume scheduled in calculations of the allowable sale quantity which is harvested from suitable forest land.

**release and weeding** - A silvicultural treatment designed to free desirable trees from competition with overstory trees, less desirable trees, or grasses and other forms of vegetative growth. It includes release of natural and artificial regeneration.

**removal cut** - The cut which removes the last seed bearers of a seed tree or shelterwood regeneration method after the new seedling stand is considered to be established.

**replacement stand** - Ten acre or larger stands of pine trees located within one-half mile of and preferably adjacent to all active RCW clusters designated to serve as replacement habitat for existing clusters when the trees die or become unsuitable for RCW. Ideally they should be 20-30 years younger than the nearby cavity trees. Like recruitment stands, they are not managed for multiple use and are retained as long as potential cavity trees exist. Since the replacement stand is considered a part of an active cluster, additional foraging habitat is not required.

**research natural area** - An area set aside by the Forest Service specifically to preserve a representative sample of an ecological community, primarily for scientific and educational purposes. Commercial exploitation is not allowed and general public use is discouraged.

**reserve trees** - Trees, pole-sized or larger, retained after the regeneration period under the clearcutting, seed-tree, shelterwood, or coppice methods.

**reserved mineral rights** - Refers to those cases wherein the minerals were severed from the surface during the transaction whereby the government acquired the land. These rights are subject to the Secretary of Agriculture's rules and regulations that were applicable at the time of the transaction.

**resource** - An aspect of human environment which renders possible, or facilitates the satisfaction of, human wants and the attainment of social objectives.

**resource allocation model** - A mathematical model using linear programming that will allocate land to prescriptions and schedule implementation of those prescriptions simultaneously. The end purpose of the model is to find a schedule and allocation that meets the goals of the forest and optimizes some objective function including minimizing costs. The model used for this planning is called SPECTRUM.

**resource use and development opportunities** - A possible action, measure, or treatment and corresponding goods and services identified and introduced during the scoping process. It may subsequently be incorporated into and addressed by the land and resource management plan in terms of a management prescription.

**responsible line officer** - The Forest Service employee who has the authority to select and/or carry out a specific planning action.

**restore** - To put back or to bring back into a former or original state. *Webster's Ninth New Collegiate Dictionary, 1984)*

**restoration** - The act or process of restoring. *Webster's Ninth New Collegiate Dictionary, 1984.)* Ecologically, the process of returning ecosystems or habitats to their former structure and species composition, especially through the return of former ecological processes such as fire. *(adapted from SAF, 1998)*

**retention** - A visual quality objective in which human activities are not evident to the casual forest visitor.

**revegetation** - The re-establishment and development of a plant cover. This may take place naturally through the reproductive processes of the existing flora or artificially through the direct action of humans (e.g.: afforestation and range reseeding).

**revision** - To make the plan new or up-to-date. Plan revision must be considered and approved in accordance with the requirements for the development and approval of a forest plan. Revisions take place every 10-15 years, but may occur more frequently if conditions or public demands change significantly.

**right-of-way** - A right of use across the lands of others. It generally does not apply to absolute purchase of ownership. Land authorized to be used or occupied for the construction, operation, maintenance, and termination of a project or facility passing over, upon, under, or through such land.

**riparian** - Land areas directly influenced by water. They usually have visible vegetative or physical characteristics showing this water influence. Streamside, lake borders, and marshes are typical riparian areas.

**riparian areas** - Areas with three-dimensional ecotones of interaction that include terrestrial and aquatic ecosystems. They extend down into the groundwater, up above the canopy, outward across the floodplain, up the near-slopes that drain to the water, laterally into the terrestrial ecosystem, and along the watercourse at a variable width.

**riparian corridor** - A management prescription area applied to both sides of a perennial or intermittent stream or along side a pond, lake, wetland, seep or spring. It is a fixed width by stream type that may fall within or beyond the true riparian area.

**riparian dependent species** - Species that are dependent on riparian areas during at least one stage of their life cycle.

**riparian functions** - Activities that occur in a riparian area without the influence of management activities. Functions include erosion and deposition by the streams, nutrient cycling, movement and storage of water, vegetative succession, etc.

**ripping** - A process where the soil is mechanically sliced or broken to improve tilth, aeration, and permeability.

**risk** - The possibility of loss or injury. *Webster's Ninth New Collegiate Dictionary, 1984*). This term and 'hazard' are sometimes used, incorrectly, as synonyms. Risk is a more general and subjective term.

**road** - A motor vehicle path more than 50 inches wide, unless designated and managed as a trail. A road may be classified, unclassified, or temporary (*36 CFR 212.1*).

**arterial road** - A road that provides service to large land areas and usually connects with public highways or other forest arterial roads to form an integrated network of primary travel routes. The location and standard are often determined by a demand for maximum mobility and travel efficiency rather than specific resource-management service. They are usually developed and operated for long-term land and resource management purposes and constant service. These roads generally serve areas larger than 40,000 acres.

**bladed skid road** - A temporary travel way in a forested area developed for use by skidders, fellers, and other harvesting equipment to drag or skid felled trees or logs from a stump to a log deck. Skid roads require excavation of a bladed travel route to allow equipment use. Skid roads are closed and revegetated following termination of use periods.

**classified road** - A road wholly or partially within or adjacent to National Forest System lands that is determined to be needed for long-term motor vehicle access, including State roads, county roads, privately owned roads, National Forest System roads, and other roads authorized by the Forest Service (*36 CFR 212.1*).

**collector road** - A road that serves smaller land areas, usually connected to a Forest arterial or public highway. They collect traffic from forest local roads or terminal facilities. The location and standard are influenced by long-term multi-resource service needs, and travel efficiency. Forest collector roads may be operated for constant or intermittent service, depending on land-use and resource management objectives for the area served by the facility. These roads generally have two or more local roads feeding into them and generally serve an area exceeding 10,000 acres.

**constant service road** - A facility on the transportation system developed and operated for long-term land management and resource utilization needs. It is also operated for continuous or annual recurrent service. System-open roads

generally remain open for public use except for seasonal closures to prevent road damage due to bad weather conditions.

**intermittent service road** - A facility on the transportation system that is developed and operated for long-term land management and resource utilization needs. It is operated for periodic service and closed for more than one year between periods of use. System-closed roads are generally built to access logging sites and are closed once logging activities are completed. They can be re-opened several years later, however, when access is once again needed to the site.

**local road** - A road that connects terminal facilities with Forest collector or Forest arterial roads, or public highways. The location and standard are usually determined by that required to serve a specific resource activity, rather than travel efficiency. Forest local roads may be developed and operated for either long- or short-term service. These roads are generally single lane.

**primitive road** - A road constructed with no regard for grade control or designed drainage, sometimes by merely repeated driving over an area. These roads are single lane, usually with native surfacing and sometimes passable with four-wheel drive vehicles only, especially in wet weather.

**public road** - A road across national forest land which was in place as a public travel way when these lands were acquired. These roads may be a part of the forest, state, or county system, and may be maintained by any of these agencies.

**temporary road** - A road authorized by contract, permit, lease, other written authorization, or emergency operation and not intended to be a part of the forest transportation system and not necessary for long-term resource management (36 CFR 212.1).

**unclassified road** - A road on National Forest System lands that is not managed as part of the forest transportation system, such as unplanned roads, abandoned travelways, and off-road vehicle tracks that have not been designated and managed as a trail; and those roads that were once under permit or other authorization and were not decommissioned upon the termination of the authorization (36 CFR 212.1).

**road closure** - A technique used by management to regulate and control the use of facilities to achieve transportation economy, user safety, protection of the public investment, and accomplishment of forest resource objectives. Closure may be intermittent or long term.

**road density** - A measure of the total length of road in any given unit of area (e.g.: 4 miles/square mile.)

**road maintenance levels** - A formally established set of objectives which describes the conditions necessary to achieve the planned operation of a road. The levels vary from Level I, basic custodial care, to Level V as described below:

**Level 1** - Assigned to intermittent service roads during the time they are closed to vehicular traffic. The closure period must exceed one year. Basic custodial maintenance is performed to keep damage to adjacent resources to an acceptable level and to perpetuate the road to facilitate future management activities and runoff patterns.

Roads receiving level 1 maintenance may be of any type, class, or construction standard, and may be managed at any other maintenance level during the time they are open to traffic. However, while being maintained at level 1, they are closed to traffic, but may be open and suitable for nonmotorized uses.

**Level 2** - Assigned to roads open for use by high clearance vehicles. Passenger car traffic is not a consideration. Traffic is normally minor, usually consisting of one or a combination of administrative, permitted, dispersed recreation, or other specialized uses. Log haul may occur at this level.

**Level 3** - Assigned to roads open and maintained for travel by a prudent driver in a standard passenger car. User comfort and convenience are not considered priorities.

Roads in this maintenance level are typically low speed, single lane with turnouts and spot surfacing. Some roads may be fully surfaced with either native or processed materials.

**Level 4** - Assigned to roads that provide a moderate degree of user comfort and convenience at moderate traffic speeds. Most roads are double lane and aggregate surfaced. However, some roads may be single lane. Some roads may be paved and/or dust abated.

**Level 5** - Assigned to roads that provide a high degree of user comfort and convenience. These roads are normally double lane, paved facilities. Some may be aggregate surfaced and dust abated.

**road reconstruction** - Work that includes, but is not limited to, widening of roads, improving alignment, providing additional turnouts, and improving sight distance - projects that improve upon the standard to which the road was originally constructed. Also undertaken to increase the capacity of the road or to provide greater traffic safety.

**roadless area** - Undeveloped federal land within which there are no improved roads or roads maintained for travel by means of motorized vehicles intended for highway use.

**Roadless Area Review and Evaluation (RARE) II** - The assessment of "primitive" areas within the national forests as potential wilderness areas as required by the



Wilderness Act. This refers to the second such assessment that was documented in the final environmental impact statement of the Roadless Area Review and Evaluation, January 1979.

**RARE II area** - An area of land identified during the RARE II and the re-evaluation process as having potential for inclusion in the National Wilderness Preservation System.

**RARE II inventory boundary** - A boundary established with public input surrounding large areas of primarily Forest Service lands for the purpose of evaluation during the RARE II process. These lands meet minimum Forest Service criteria for potential wilderness.

**rollover** - A maximum PNV solution with an individual good or service production constrained at its maximum potential level. It provides an economically efficient basis for comparing all benchmark levels.

**rotation** - The number of years required to establish and grow timber crops to a specified condition or maturity for harvest. Even- and two-aged management prescriptions in the Forest Plan use a rotation.

**rotation age** - The age at which a stand meets established criteria for maturity and is scheduled for regeneration.

**roundwood** - Timber and fuelwood prepared in the round state - from felled trees to material trimmed, barked, and crosscut (e.g.: logs and transmission poles).

**RPA Program** - The recommended direction for long-range management of the Nation's renewable resources, including National Forest System lands and private resources. (Superseded by the USDA's strategic plan.)

**runoff** - The total stream discharge of water from a watershed including surface and subsurface flow, but not groundwater. Usually expressed in acre-feet.

**rural** - A recreation opportunity spectrum classification for areas characterized by a substantially modified natural environment. Sights and sounds of man are evident. Renewable resource modification and utilization practices enhance specific recreation activities or provide soil and vegetative cover protection.

**rural water use** - Term used in previous water-use circulars to describe water used in suburban or farm areas for domestic and livestock needs. The water is generally self-supplied.

## **S**

**sacred site** - Any specific, discrete, narrowly delineated location on Federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion;

provided that the tribe or appropriately authoritative representative of an Indian religion had informed the agency of the existence of such a site.

**sale schedule** - The quantity of timber planned for sale by time period from an area of suitable land covered by a forest plan. The first period (usually a decade) of the selected sale schedule provides the allowable sale quantity. Future periods are shown to establish that long-term sustained yield will be achieved and maintained.

**salmonids** - Fish of the family *salmonidae*, the chars, trouts, salmon, whitefishes and graylings.

**salvage** - A type of timber harvest in which trees removed are dead, dying, or are likely to die in the near future and are harvested before they deteriorate and value declines.

**salvage cutting** - The removal of dead trees or trees being damaged or killed by injurious agents other than competition. To recover value that would otherwise be lost.

**sanitation** - The removal of trees to improve stand health and to reduce actual or anticipated spread of insects and disease.

**sanitation cutting** - A type of timber harvest in which trees removed are infested with an insect or infected with a disease organism and are a source of further infestation or infection if they remain.

**sapling** - A usually young tree that is larger than a seedling, but smaller than a pole.

**savanna** - A vegetation community characterized by few and scattered trees and a predominantly herbaceous ground cover.

**sawtimber** - Trees suitable in size and quality for producing logs that can be processed into dimension lumber.

**scalloping** - The undulating vegetative edge treatment given to a travel way or opening for aesthetic purposes.

**Scenery Management System** - A system for the inventory and analysis of the aesthetic values of the National Forest Lands. It replaces the Visual Management System (VMS) as defined in Agriculture Handbook #462.

**scenic attractiveness** - The scenic importance of a landscape based on human perceptions of the intrinsic beauty of landform, rockform, waterform, and vegetation pattern. Classified as A (Distinctive), B (Typical or Common), or C (Undistinguished).

**scenic class** - A system of classification describing the importance or value of a particular landscape or portions of that landscape. Values range from 1 (highest value) to 7 (lowest value).

**scenic integrity** - A measure of the degree to which a landscape is visually perceived to be "complete." The highest scenic integrity ratings are given to those landscapes

which have little or no deviation from the character valued for its aesthetic appeal. Scenic integrity is used to describe an existing situation, standard for management, or desired future condition.

**Scenic Integrity Objective (SIO)** - A desired level of excellence based on physical and sociological characteristics of an area. Refers to the degree of acceptable alterations to the valued attributes of the characteristic landscape. Objectives include Very High, High, Moderate, and Low.

**Very High (VH) SIO** - Generally provides for only ecological changes in natural landscapes and complete intactness of landscape character in cultural landscapes.

**High (H) SIO** - Human activities are not visually evident to the casual observer. Activities may only repeat attributes of form, line, color, and texture found in the existing landscape character.

**Moderate (M) SIO** - Landscapes appear slightly altered. Noticeable human-created deviations must remain visually subordinate to the landscape character being viewed.

**Low (L) SIO** - Landscapes appear moderately altered. Human-created deviations begin to dominate the valued landscape character being viewed, but borrow from valued attributes such as size, shape, edge effect, and pattern of natural openings; vegetative type changes; or architectural styles outside the landscape being viewed.

**scoping** - The ongoing process to determine public opinion, receive comments and suggestions, and determine issues during the environmental analysis process. It may involve public meetings, telephone conversations, or letters.

**scoured channel** - A definable channel of flow where surface water converges with enough energy to remove soil, organic matter, and leaf litter.

**secondary processor** - A mill that processes partially manufactured wood (a wood product such as chips or lumber) into a finished product. Examples include paper and furniture.

**secondary trout streams** - those streams with no evidence of natural trout reproduction, but which are capable of supporting trout throughout the year.

**section** - An ecological unit in the subregion planning and analysis scale of the National Hierarchical Framework corresponding to subdivisions of a Province having broad areas of similar geomorphic process, stratigraphy, geologic origin, drainage networks, topography, and regional climate. Such areas are often inferred by relating geologic maps to potential natural vegetation groupings as mapped by Kuchler (1964).

**sediment** - Solid mineral and organic material that is in suspension, is being transported, or has been moved from its site of origin by air, water, gravity, or ice.

**seedbed** - The soil or forest floor on which seed falls.

**seedling** - A tree grown from seed that has not yet reached a height of 3 feet or exceeded 2 inches diameter at breast height. (*Silvics of North America, 1990*)

**seedling/sapling stands** - Stands at least 16.7 percent stocked with growing stock trees, of which more than one-half of total stocking is seedlings and saplings.

**seed tree** - An even-aged regeneration method where in a single cut, the removal of all merchantable trees in a stand, except for a small number of widely dispersed trees retained for seed production, and to produce a new age class in a fully-exposed microenvironment.

**seed-tree with reserves method** - A two-aged regeneration method in which some or all of the seed trees are retained after regeneration has become established to attain goals other than regeneration.

**seen area** - The total landscape area observed based upon landform screening. Seen areas may be divided into zones of immediate foreground, foreground, middle-ground, and background. Some landscapes are seldom seen by the public.

**seep** - A wet area where a seasonal high water table intersects with the ground surface. Seeps that meet the definition of a wetland are included in the Riparian Corridor.

**selected species** - Species selected as indicators of the effects of management. Term is the same as management indicator species.

**selection cutting** - The removal of selected trees, particularly mature trees at planned intervals (cutting cycle), individually or in small groups, from an uneven-aged forest to realize the yield, and establish a new crop of desired tree species. Additionally, the tending of immature stand components are accomplished at each cutting cycle.

**semi-evergreen** - A plant that retains at least some of its leaves as green into the dormant season.

**sensitive species** - Those species that are placed on a list by the Regional Forester for which population viability is a concern. In this Region we generally use Natural Heritage rankings G1-3, N1-3, T1-3 or H, and USDI Fish and Wildlife Service candidates as a basis for developing the list.

**sensitivity analysis** - A determination of the consequences of varying the level of one or several factors while holding other factors constant.

**sensitivity level** - A particular degree or measure of viewer interest in the scenic qualities of the landscape.

**sequential lower bounds** - The maximum percent decrease in harvest volume in any decade as compared to the preceding decade. This prevents the forest from significantly decreasing its share of the market, which would violate the assumptions of the horizontal demand curve.

**sequential upper bounds** - The maximum percent increase in harvest volume in any decade as compared to the preceding decade. This prevents the forest from significantly increasing its share of the market, which would violate the assumptions of the horizontal demand curve.

**seral** - The stage of succession of a plant or animal community that is transitional. If left alone, the seral stage will give way to another plant or animal community that represents a further stage of succession.

**SETWIGS** - The basic growth and yield model (SPECTRUM model) used by the Southern Appalachian Forests in Plan revision. Originally called SouthEast TWIGS.

**shade intolerant** - Having the capacity to compete for survival under direct light conditions. (SAF, 1998)

**shade tolerant** - Having the capacity to compete for survival under shaded (that is, indirect light) conditions. (SAF, 1998)

**shearing** - A method used in land clearing whereby tree stems are severed at ground line by large bladed mechanisms mounted on crawler tractors (e.g.: serrated tooth V-blade or KG blade).

**shelterwood** - A regeneration method of regenerating an even-aged stand in which a new age class develops beneath the partially shaped microenvironment provided by the residual trees. The sequence of treatments can include three distinct types of cuttings: (1) an optional preparatory harvest to enhance conditions for seed production; (2) an establishment harvest to prepare the seed bed, and to create a new age class; and 3) a removal harvest to release established regeneration from competition with the overwood.

**shelterwood with reserves** - A two-aged regeneration method in which some or all of the shelter trees are retained well beyond the normal period of retention to attain goals other than regeneration.

**short-term facilities** - Facilities developed and operated for limited resource activity or other project needs. It will cease to exist as a transportation facility after the purpose for which it was constructed is completed, and the occupied land is reclaimed and managed for natural resource purposes.

**silvicultural system** - A management process whereby forests are tended, harvested, and replaced, resulting in a forest of distinctive form. Systems are classified according to the method of carrying out the fellings that remove the mature crop and provide for regeneration, and according to the type of forest thereby produced.

**silviculture** - The art and science of controlling the establishment, growth, composition, health, and quality of forests and woodlands. Silviculture entails the manipulation of forest and woodland vegetation in stands and on landscapes to meet the diverse needs and values of landowners and society on a sustainable basis.

**silvics** - The study of the life history and general characteristics of forest trees and stands, with particular reference to environmental factors, as a basis for the practice of silviculture.

**single-tree selection** - A regeneration method of creating new age classes in uneven-aged stands in which individual trees of all size classes are removed uniformly throughout the stand to achieve desired stand structural characteristics.

**site** - An area in which a plant or stand grows, considered in terms of its environment, particularly as this determines the type and quality of the vegetation the area can carry.

**site class** - A classification of site quality, usually expressed in terms of ranges of dominant tree height at a given age or potential mean annual increment at culmination.

**site index** - A species-specific measure of actual or potential forest productivity (site quality, usually for even-aged stands) expressed in terms of the average height of trees included in a specified stand component (defined as a certain number of dominants, co-dominants, or the largest and tallest trees per unit area) at a specified index or base age.

**site preparation** - The preparation of the ground surface prior to reforestation. Various treatments are applied as needed to control vegetation that will interfere with the establishment of the new crop of trees or to expose the mineral soil sufficiently for the establishment of the species to be reproduced.

**site productivity class** - A species-specific classification of forest land in terms of inherent capacity to grow crops of industrial, commercial wood. Usually derived from the site index.

**site quality** - A ranking of the inherent ability of a specific location to grow plants generally, or to grow specific species.

**site quality (productivity)** - The productive capacity of a site, usually expressed as volume production of a given species.

**site visit** - See 'recreation visit.'

**skid trail** - A temporary, non-structural pathway over forest soil created by dragging or skidding felled trees or logs from a stump to a log deck. Skidders, fellers and other harvesting equipment use skid trails. Development does not require excavation with equipment.

**skidding** - A term for moving logs by dragging from stump to roadside, deck, or other landing.

**slash** - The residue left on the ground after felling, silvicultural operations, or as a result of storm, fire, girdling, or poisoning. All vegetative debris resulting from the purchaser's operations. Slash associated with construction of roads is subject to treatment according to construction specifications, all other is subject to the terms of contract provision B/BT6.7.

**sliver** - In a GIS application, very small polygons found along the shared boundary of the two input maps in a map overlay. Slivers often result from digitizing errors."

**snag** - A dead or partially dead (more than 50 percent) hardwood or pine tree which is used by many bird species for perching, feeding, or nesting.

**social analysis** - An analysis of the social (as distinct from the economic and environmental) effects of a given plan or proposal for action. It includes identification and evaluation of all pertinent desirable and undesirable consequences to all segments of society, stated in some comparable quantitative terms, including persons or percent of population in each affected social segment. In addition, social analysis also includes a subjective analysis of social factors not expressible in quantitative terms.

**softwood** - Trees belonging to the botanical group *Gymnospermae* and characterized by needle-leaved and parallel-veined foliage. (*adapted from SAF, 1998*)

**soil enhancement** - Application of methods or materials to the soil to increase its productivity and stimulate growth of vegetation.

**soil productivity** - The inherent capacity of a soil to support the growth of specified plants, plant communities, or a sequence of plant communities. Soil productivity may be expressed in terms of volume or weight/unit area/year, percent plant cover, or other measures of biomass accumulation.

**soil quality** - The capacity of a soil to function within ecosystem boundaries to sustain biological productivity, maintain environmental quality, and promote plant and animal health.

**soil survey** - A term for the systematic examination of soils in the field and in laboratories; their description and classification; the mapping of kinds of soil; the interpretation of soils according to their adaptability for various crops, grasses, and trees; their behavior under use of treatment for plant production or for other purposes; and their productivity under different management systems.

**soil and water resource improvement** - The application of preplanned treatment measures designed to favorably change conditions of water flow, water quality, rates of soil erosion, and enhancement of soil productivity.

**source water (also public drinking water source)** – the water body, within the surface or subsurface, from which water is withdrawn for a public water system to be treated and/or distributed.

**southern pine beetle** - One of the many species of pine bark beetles that are present in the forest at all times. When environmental and forest conditions become favorable, the beetle populations can increase and cause substantial timber losses over extensive areas in a relatively short period of time.

**spatial feasibility testing** - A process for verifying on a sample basis that land allocation and scheduling is actually implementable on the ground.

**special concern species** - Species that is federally listed as Category 2 or ranked as globally rare by state heritage programs and The Nature Conservancy. Also used by some states for any species of wild animal native, or once-native, to the state which is determined by the state to require monitoring.

**special use authorization (or permit)** - A permit, term permit, or easement issued under established laws and regulations to an individual, organization, or company for occupancy or use of National Forest System land for some special purpose.

**special places** - Those specific locations and expanses in outdoor settings that have attractions and features that are identified as unique, different, distinctive, and extraordinary to people. Special places can range in size from small areas to very large areas.

**species composition** – See ‘composition.’

**splash dams** - Dams, usually temporary, built of wood across mountain streams to pond up large amounts of water.

**spring** - A water source located where water begins to flow from the ground due to the intersection of the water table with the ground surface. Generally flows throughout the year.

**stand** - A contiguous group of trees sufficiently uniform in age-class distribution, composition, and structure, and growing on a site of sufficiently uniform quality, to be a distinguishable unit.

**stand density** - A quantitative measure of stocking expressed either absolutely per unit of land in terms of number of trees, basal area, volume per unit area, or relative to some standard condition.

**stand improvement** - A term comprising all intermediate cuttings made to improve the composition, structure, condition, health, and growth of even-aged, two-aged, or uneven-aged stands.

**standard** - Requirement that precludes or imposes limitations on resource management practices and uses. Usually for resource protection, public safety, or addressing an issue.



**state, county, and municipal land** - Land owned by states, counties, and local public agencies or municipalities, or land leased to these governmental units for 50 years or more.

**stocking** - The degree of occupancy of land by growing stock trees, measured by basal area or number of trees per unit area and spacing compared with a minimum standard - which varies by tree size and species or species group - to the occupancy that is required to fully utilize the growth potential of the land.

**story** - A single distinct crown layer in a forest tree community that shows several layers at different heights. In a three-layered structure, for example, these would be divided into 'overstory', 'mid-story', and 'understory' (*adapted from SAF, 1998*)

**stratified mixture** - A stand in which different tree species occupy different strata of the total crown canopy.

**stratigraphic** - Pertaining to strata or layers, as in a description of layers of rock types.

**stratum (canopy layer)** - A distinct layer of vegetation within a forest community.

**stream** - A general term for a body of flowing water. In hydrology the term is generally applied to the water flowing in a natural channel as distinct from a canal.

**streamside management zones (SMZ)** - A designated area of varying width adjacent to the banks of streams and bodies of water where management practices that might affect water quality, fish, or other aquatic resources are modified.

**stressors** - Pressure or change brought upon an ecosystem by pollution sources including sediment, contaminants, and toxins.

**subsection** - An ecological unit in the subregion planning and analysis scale of the National Hierarchical Framework corresponding to subdivisions of a Section into areas with similar surficial geology, lithology, geomorphic process, soil groups, subregional climate, and potential natural communities.

**succession** - In ecology, the gradual replacement of one community of plants by another. Succession is called 'primary' when it occurs on sites that have not previously supported vegetation and 'secondary' when all or part of a previously existing plant community is being replaced following disturbance. (*from SAF, 1998*)

**successional stage** - A period, marked by distinctiveness of structure, in the development of a forest community from establishment of tree regeneration to advanced age. In general, successional stages used in the Environmental Impact Statement and Plan are defined in terms of forest age as a surrogate measure for the distinct structure at each stage as follows:

- early: 0 to 10 years old
- seedling/sapling: 11 to approximately 40 years old

- mid: approximately 41 to 80 years old
- late: approximately 80 to 110 years old
- old: over approximately 80 years old; includes old growth

**suitability** - The appropriateness of applying certain resource management practices to a particular area of land, as determined by an analysis of the economic and environmental consequences and the alternative uses foregone. A unit of land may be suitable for a variety of individual or combined management practices. (National Forest Management Act, 1976)

**suitable forest land** - National Forest System land allocated by a Forest Plan decision to be managed for timber production on a regulated basis. *Regulated basis* means a systematic relationship between tree growth and timber harvest such that a specific timber volume objective level can be sustained indefinitely. On lands found to be not suitable for timber production on a regulated basis salvage sales, sales necessary to protect other multiple-use values, or activities that meet other objectives on such lands if the Forest Plan establishes that such actions are appropriate are permitted by the National Forest Management Act (36 CFR 219.27 (C) (1)).

**supply** - The amount of a good or service that producers are willing to provide at a specified price, time period, and conditions of sale.

**suppression** – (1) In forest ecology, the reduced vigor or even death of a plant as a result of competition that reduces light available for photosynthesis and also available nutrients and water. (2) to slow or stop the progression of a fire, invasion of non-native biota, or of an insect or disease outbreak. Suppression does not eliminate a re-occurrence or, for biota, necessarily eradicate every individual of the pest. (from SAF, 1998)

**surficial water** - Water on or at the ground surface. Does not include ditches, canals, spillways, or other human-created flow channels.

**susceptibility** – The probability that a tree or a stand will be attacked by, or incur an outbreak of, an insect or pathogen. (SAF, 1998) See also ‘hazard’.

**suspended sediment** - sediment that is carried in suspension by the turbulent components of water

**sustained yield of the products and services** - The achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the National Forest System without impairment of the productivity of the land. (National Forest Management Act, 1976)

**sympatric** - Condition where two or more closely related species live together in the same section of stream. The species have overlapping distributions. Opposite of allopatric.



**targets** - Objectives assigned to the forest by the Regional Plan.

**taxonomic** – Relating to the classification of organisms into categories according to their natural relationships.

**tentatively suitable forest land** - National Forest System land that meets specific criteria in the implementing regulations of the National Forest Management Act (36 CFR 219.14 for further consideration during the planning process for timber production on a regulated basis. Note that “tentatively suitable land” is not the same as the allocation of the existing Forest Plan, as amended since 1985, but is identified by a reanalysis. (Also called “Phase 1 suitability” or “Stage 1 suitability” because its designation as Part “A” of a three-part process described by the text of the National Forest Management Act.) (Timber Supply/Demand).

**term permit** - A special-use authorization to occupy and use National Forest System land, other than rights-of-way, for a specified period. It is revocable and compensable according to its terms.

**theming** – A land and/or management scheme created with the list of land areas and/or management prescriptions.

**thermoelectric power water use** - Water used in the process of generating thermoelectric power.

**thinning** - A cutting made to reduce stand density of trees primarily to improve growth, enhance forest health, or to recover potential mortality.

**thinning interval** - The period of time between successive thinning entries, usually used in connection with even-aged stands.

**threatened species** - Any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. Designated as a threatened species in the *Federal Register* by the Secretary of Interior.

**tiering** - A National Environmental Policy Act term used to reference the coverage of general matters in broader environmental impact statements (including national program or policy statements), with subsequent narrower statements or environmental analyses (including regional or basinwide program statements or ultimately site-specific statements), incorporating by reference the general discussions and concentrating solely on the issues specific to the statement subsequently prepared.

**timber** - Wood retaining many of the recognizable characteristics of a tree: round, bark covered, and tapering, but without the limbs and leaves. In wood-industry usage, it may be “standing timber”- that portion of living trees with characteristics of value to

the wood-using industry, or cut trees not yet processed beyond removing limbs and tops.

**timber demand** - A relationship between stumpage or delivered log price and the quantity of timber produced.

**timber inventory** – The volume of wood in that portion of the stem of living trees that have the characteristics in economic demand by wood-using industry and occurring on timberland within a defined geographic area. See ‘timberland’.

**timber management** – A vegetation management program that provides wood products to wood using industry, either as a primary purpose or as an associated benefit derived from satisfying another purpose such as creation of wildlife habitat.

**timber product market area** - The geographic area enclosed within a polygon drawn by connecting those mills buying forest timber that are the farthest away from the forest.

**timber production** - The purposeful growing, tending, harvesting, and regeneration of regulated crops of trees to be cut into logs, bolts, or other round sections for industrial or consumer use. For purposes of forest planning, timber production does not include the production of fuelwood or harvests from unsuitable lands.

**timber removals (drain)** - The merchantable volume of trees removed from the inventory by harvesting, cultural operations including stand improvement, land clearing, or changes in land use expressed as an annual average between surveys. Within national forests, removals are almost all timber harvest except that the inventory on lands withdrawn by legislative action is also normally accounted for as “removals.”

**timber sale program quantity** - The volume of timber planned for sale during the first decade of the planning horizon. It includes the allowable sale quantity (chargeable volume), and any additional material (non-chargeable volume), planned for sale. The timber sale program quantity is usually expressed as an annual average for the first decade.

**timber stand improvement** - A term comprising all intermediate cuttings made to improve the composition, constitution, condition, and increment of a timber stand.

**timber supply** - The amount of wood raw material available to be harvested within specified parameters of time and geographic area.

**timberland** – Land that is: (a) at least 16.7-percent stocked with forest trees of any size, or formerly having had such tree cover, but (b) not currently developed for a non-forest use, and (c) capable of producing at least 20 cubic feet of industrial wood per acre per year, and (d) if public lands, not withdrawn from timber harvest by legislative action. Currently, inaccessible and inoperable areas are included. (*Forest Service, 1988*)

**tolerance** – (1) ecology: the capacity of an organism or biological process to subsist under a given set of environmental conditions. (2) silviculture: the capacity of trees to grow satisfactorily in the shade of, and in competition with, other trees. (SAF, 1998)

**topography** - The configuration of a land surface including its relief, elevation, and the position of its natural and human-made features.

**toxicity index profile** – Estimate of cumulative potential for toxic impacts in water.

**tract** – An area of land; may be either large or small; and may refer to either an indefinite area or a definite area such as an area described in a deed.

**traditional cultural property** - A historic property "... that is eligible for inclusion in the National Register because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community.

**traffic service levels** – A description of a road's significant traffic characteristics and operating conditions labeled A through D and defined as follows:

- A) Free flowing, mixed traffic; stable, smooth surface. Provides safe service to all traffic.
- B) Congested during heavy traffic, slower speeds and periodic dust; accommodates any legal-size load or vehicle.
- C) Interrupted traffic flow, limited passing facilities, may not accommodate some vehicles. Low design speeds. Unstable surface under certain traffic or weather conditions.
- D) Traffic flow is slow and may be blocked by management activities. Two-way traffic is difficult, backing may be required. Rough and irregular surface. Travel with low clearance vehicles is difficult. Single purpose facility.

**trail** - a travel way that has been inventoried in the Forest Service sanctioned trail system because it meets all applicable environmental and use standards. (See also, "designated trail.")

**trailheads** - The parking, signing, and other facilities available at the terminus of a trail.

**two-aged** – A plant community having a portion of its individuals of one age and another portion of very different age such that they are distinguishable from one another by height, diameter, crown configuration or other readily observed features.

**two-aged silvicultural system** - A planned sequence of treatments designed to maintain and regenerate a stand with two age classes.

**two-aged stand** - A stand composed of two distinct age classes that are separated in age by more than 20 percent of rotation.

**type conversion** - A change from one tree species or species group to another. An example is a change from hardwoods to pine.

**U**

**unacceptable alteration** - A scenic integrity level (never an objective) where human activities of vegetative and landform alterations are excessive and totally dominate the natural, natural-appearing or valued cultural landscape character.

**undercutting (root pruning)** - The root pruning of seedlings in a nursery bed.

**understory** - An imprecise term generally meaning 'the trees and other vegetation growing under a more or less continuous cover of branches and foliage formed collectively by the upper portion (overstory) of adjacent trees and other woody growth.' (SAF.1998) In use, typically meaning those woody species that are approximately ten feet tall or less; that is, normally seen in the field of vision, and also incapable of forming a high canopy. Examples include rhododendron, mountain laurel, huckleberry, and witch hazel.

**uneven-aged management** - The application of a combination of actions needed to simultaneously maintain: (a) continuous high-forest cover, (b) recurring regeneration of desirable species, and (c) the orderly growth and development of trees through a range of diameter or age classes to provide a sustained yield of forest products. Cutting is usually regulated by specifying the number or proportion of trees of particular sizes to retain within each area, thereby maintaining a planned distribution of size classes. Cutting methods that develop and maintain uneven-aged stands are single-tree selection and group selection. 36 CFR 219.3

**uneven-aged regeneration methods** - Methods of regenerating a forest stand, and maintaining an uneven-aged structure by removing some trees in all size classes either singly, in small groups, or strips. The methods are single-tree or group selection.

**uneven-aged silvicultural system** - A planned sequence of treatments designed to maintain and regenerate a stand with three or more age classes.

**universal soil loss equation** - An equation used to estimate soil erosion rates and for the design of water erosion control systems.

**un-merchantable** - Wood that does not have characteristics in economic demand by wood-using industry.

**unregulated forest** - Commercial forest land that will not be organized for timber production under sustained-yield principles.

**unsuitable forest land (not suited)** - Forest land not managed for timber production because: (a) Congress, the Secretary [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 five years after final harvest, as reflected in current research and experience; (e) there is, at present, a lack of adequate information about 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 Forest Plan. Salvage sales, sales necessary to protect other multiple-use values, or activities that meet other objectives on such lands if the Forest Plan establishes that such actions are appropriate are permitted on unsuitable forest lands by the National Forest Management Act (36 CFR 219.27 (C) (1)).

**urban** – An area characterized by a substantially urbanized environment. The background may have natural-appearing elements.

**utility corridor** – A corridor across the landscape linear in nature and of a width required to allow for utility construction and maintenance.

**utilization standards** - Measurements for standing trees that describe the minimum size tree that will be designated for sale for various products including sawtimber or small roundwood.



**values, market** - Prices of market goods and services measured in real dollars in terms of what people are willing to pay as evidenced by market transactions.

**values, non-market** - Prices of non-market goods and services imputed from other economic values.

**variety class** - A classification system for establishing three visual landscape categories according to the relative importance of the visual features. This classification system is based on the premise that all landscapes have some visual values, but those with the most variety or diversity of visual features have the greatest potential for high scenic value.

**vector** – A matrix composed of only one row or column.

**vegetation management** – In Forest Service usage, to change species composition or structure of plant communities through human intervention regardless of the purpose, or to protect communities from some types of disturbance such that natural changes continue to occur.

**Very Low Scenic Integrity (VL)** – An existing scenic inventory classification in which landscapes appear heavily altered. Human created deviations may strongly dominate the valued landscape character. They may not borrow from valued attributes of size, shape, edge effect, and pattern of natural openings, vegetative type changes, or architectural styles within or outside the landscape being viewed. However, deviations must be shaped and blended with the natural terrain so that elements

such as edges, roads, landings, and structures do not dominate the composition. VL is not a scenic integrity objective.

**viable population** - Population of plants or animals that has the estimated numbers and distribution of reproductive individuals to ensure its continued existence is well distributed in the planning area.

**viewshed** - The total landscape seen, or potentially see, from all or a logical part of a travel route, use area, or water body.

**vigor** - Active, healthy, well-balanced growth. (*Webster's Ninth New Collegiate Dictionary, 1990*)

**visibility** - an air quality related value (AQRV), this term refers to the ability of an air mass to convey the landscape image. Similar to 'turbidity,' except that it is a measure of air quality.

**visual quality objective (VQO)** - A desired level of excellence based on physical and sociological characteristics of an area under the Visual Management System (VMS). Refers to the degree of acceptable alterations of the characteristic landscape. Objectives include Preservation, Retention, Partial Retention, Modification, and Maximum Modification. Except for "preservation," each goal describes a different degree of acceptable alteration of the natural landscape based on the importance of esthetics. The Visual Management System, as defined in Agricultural Handbook #462 was replaced by the SMS (see also Scenery Management System).

**preservation** - A visual quality objective that provides for ecological change only.

**retention** - A visual quality objective in which human activities are not evident to the casual forest visitor.

**partial retention** - A visual quality objective in which human activities may be evident, but must remain subordinate to the characteristic landscape.

**modification** - A visual quality objective in which human activities may dominate the characteristic landscape but must, at the same time, use naturally established form, line, color, and texture appearing, but should appear as a natural occurrence when viewed as background.

**maximum modification** - A visual quality objective in which human activities may dominate the characteristic landscape, but should appear as a natural occurrence when viewed as background.

**visual resource** - The composite of basic terrain, geological features, water features, vegetative patterns, and land-use effects that typify a land unit and influence the visual appeal the unit may have for visitors.

**vulnerability** - open to attack or damage. (*Webster's Ninth New Collegiate Dictionary, 1990*)



**W**

**warm water fishery** - Aquatic habitats that support fish species which have their best reproductive success and summer water temperature tolerance between 75 and 85 degrees Fahrenheit (23-29 C), or about 80 degrees Fahrenheit. Examples include sunfish species, and largemouth bass.

**water bars** - A change in the grade of a roadbed, trail surface, or fireline used to divert water off the surface to prevent it from developing ruts and possibly carrying sediment to a stream.

**water yield** - The measured output of the forest's streams expressed in acre-feet. The amount or volume of water that flows in a given period of time from a watershed.

**water table** - The upper surface of ground water. Below it, the soil is saturated with water.

**watershed** - The total area above a given point on a stream that contributes water to the flow at that point.

**watershed condition rank** - A measure used to characterize the condition of fifth level Hydrologic Unit Codes (HUCs or watersheds) with respect to current and future sediment load increases.

**Weeks Act** - Enacted by Congress in 1911, Federal law authorizes the acquisition of lands on the watershed of navigable streams for the purposes of conserving their navigability, or for the purpose of timber.

**wetlands** - Areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas, and are found primarily within palustrine systems; but may also be within riverine, lacustrine, estuarine, and marine systems.

**white oak group** - A subset of oak species characterized by smooth lobes on the leaves, no delay in germination of the acorns, and closed pores in the wood.

**wild and scenic river** - A river or section of river designated as such by congressional action under the Wild and Scenic Rivers Act of Oct. 2, 1968, as supplemented and amended, or those sections of a river designated as wild, scenic, or recreational by an act of the legislature of the state or states through which it flows.

**River classifications under the Wild and Scenic Rivers Act**

**wild** - Rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

**scenic** – Rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

**recreational** – Rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

**wilderness** - A Congressionally-designated area that is part of the National Wilderness Preservation System established through the Wilderness Act of 1964. Also, defined in the Act as a wilderness, in contrast with those areas where man and his own works dominate the landscape; is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain.

**wilderness study area** - One of the areas selected by the Chief of the Forest Service from an inventory of undeveloped National Forest System lands as having apparent high qualities for wilderness. Lands possessing the basic characteristics of wilderness and designated by Congress for further wilderness study. A study can determine whether they should be recommended for addition to the National Wilderness Preservation System.

**wildland fire** - Any non-structural fire on wildlands other than one intentionally set for management purposes. Confined to a predetermined area. Not to be confused with “fire use,” which includes prescribed fire.

**wildland urban interface** – The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels.

**wildlife** - All non-domesticated mammals, birds, reptiles, and amphibians living in a natural environment, including game species and non-game species. Animals, or their progeny (i.e., feral animals - including horses, burros, and hogs), that once were domesticated, but escaped captivity, are not considered wildlife.

**wildlife habitat diversity** - The distribution and abundance of different plant and animal communities and species within a specific area.

**wildlife habitat improvement** - The manipulation or maintenance of vegetation to yield desired results in terms of habitat suitable for designated wildlife species or groups of species.

**with-without comparison** - An evaluation that compares outputs, benefits, costs, and other effects with a base alternative.

**withdrawal of land** - An order removing specific land areas from availability for certain uses.

**withdrawn national forest lands** - National Forest System lands segregated or otherwise withheld from settlement, sale, location, or entry under some or all of the general land laws.

**woodland** – A plant community in which trees are often small, characteristically with a greater proportion of their total height being crown than clear bole, and having trees spaced far enough apart that the canopies of adjacent trees usually do not touch and with the ground vegetation being mostly herbaceous, commonly grass. (adapted from SAF,1998)

**woodland grazing** - Grazing livestock on the grass-forbs existing under forested stands, mainly southern yellow pine types.

**wrenching** - The disturbance of seedling roots in a nursery bed (e.g.: with a tractor-drawn blade), with the objective of stimulating the development of a fibrous root system.

## X

**xeric** – Pertaining to sites or habitats characterized by decidedly dry conditions.

## Y

**yarding** - Moving cut trees from where they fall to the point where logs are loaded for transport to mill. Most commonly used in cable logging operations.

**yield composite** – Activity and output relationships which estimate yields. They allow the development of a yield stream from a related yield stream without entering each yield coefficient independently. Yield composite relationships can be time, age, or sequence based.

**yield stream** – A subset of a yield table containing specific information for an activity or output. A timber output may have a yield stream for amount, diameter, basal area, or trees.

**yield table** - A tabular statement of outputs expected to be produced under a specific set of conditions.

## Z

**zone** – Large, contiguous areas of land that include watersheds or management areas. A zone can be comprised of several complete analysis units. The land within a zone is generally a heterogenous mixture of environmental types.

**zone management actions** – Management actions available to zones. They contain the ability to coordinate the management activities that occur within a zone.

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