

# Glossary

# GLOSSARY OF ABBREVIATIONS AND TERMS

## ABBREVIATIONS

AC. Or Ac.	Acres	FSH	Forest Service Handbook
ACS	Available, Capable, and Suitable	FSM	Forest Service Manual
AF or Ac. Ft.	Acre feet	GIS	Geographic Information System
ASQ	Allowable Sale Quantity	GPM	Gallons per minute
AMS	Analysis of the Management Situation	GTM	Grass-Tree Mosaic
ATV	All Terrain Vehicle	HEI	Habitat Effectiveness Index
AUM	Animal Unit Month	ICO's	Issues, Concerns, and Opportunities
BF or Bd. Ft.	Board foot	IDT	Interdisciplinary Team
BLM	Bureau of Land Management	IPM	Integrated Pest Management
BM	Benchmark	K-V	Knutson-Vandenberg Act
BMP	Best Management Practices	LAC	Limit of Acceptable Change
CF or Cu. Ft.	Cubic Feet	LMA	Land Management Allocation
CFL	Commercial Forest Land	LTSY	Long-Term Sustained Yield
CFR	Code of Federal Regulations	LTSYC	Long-Term Sustained Yield Capacity
CFS	Cubic feet per second	MIH	Management Information Handbook
C&H	Cattle and Horse allotment	M	Thousand
CMAI	Culmination of Mean Annual Increment	MM	Million
CTUIR	Confederated Tribes of the Umatilla Indian Reservation	MBF, MMBF	Thousand board feet; million board feet
DBH or d.b.h.	Diameter at breast height	MCF, MMCF	Thousand cubic feet; million cubic feet
DEIS	Draft Environmental Impact Statement	MR	Management Requirement
DIB or d.i.b.	Diameter inside bark	NDF	Nondeclining Flow
EIS	Environmental Impact Statement	NEPA	National Environmental Policy Act
FEIS	Final Environmental Impact Statement	NFMA	National Forest Management Act
FMPS	A Linear Programming solution System used in FORPLAN	RM	Roaded Modified
NFS	National Forest System	RN	Roaded Natural
NH	Natural Regeneration and Harvest	RNA	Research Natural Area
NORT	New Oregon Trail	ROS	Recreation Opportunity Spectrum
NPB	Net Public Benefits	RPA	Resource Planning Act
NRT	National Recreation Trails	RVD	Recreation Visitor Day
NTCCH	Natural Regeneration, Precommercial Thin, Two Commercial Thinnings, and Final Harvest	SCORP	State-wide Comprehensive Outdoor Recreation Plan
NTH	Natural Regeneration, Precommercial Thin, and Final Harvest	SHCI	Smolt Habitat Capability Index
		SHPO	State Historic Preservation Office

NTM	No Treatment	SIA	Special Interest Area
ODFW	Oregon Department of Fish and Wildlife	SMU	Streamside Management Unit
OG	Old Growth	SPM	Semi-primitive Motorized
OHV	Off-Highway Vehicle	SPNM	Semi-primitive Non-Motorized
ORV	Off-road Vehicle	SRI	Soil Resource Inventory
PAOT	Persons-at-one-time	T&E	Threatened & Endangered
PGTCCH	Plant Genetically Improved Stock, precommercial Thin, Two Commercial Thinnings, and Final Harvest	T/E/S	Threatened, Endangered, & Sensitive
PL	Public Law	TACS	Tentatively Available, Capable & Suitable
PM	Particulate Matter	TSI	Timber Stand Improvement
PMOA	Programmatic Memorandum of Agreement	TSPQ	Timber Sale Program Quantity
PNV	Present Net Value	USDA	U.S. Department of Agriculture
PNW	Present Net Worth	VMS	Visual Management System
PTCCH	Plant Normal Stock, Precommercial Thin, Two Commercial Thinnings, and Final Harvest	VQL	Visual Quality Level
RARE	Roadless Area Review & Evaluation	VQO	Visual Quality Objective
RIM	Recreation Information Management	WDW	Washington Department of Wildlife
		WFUD	Wildlife/Fish User Days
		WRS	Wilderness Resource Spectrum

## TERMS

### A

Abnormally Heavy Storms	Storms with a 10- to 100-year return period. That is, a 10-year storm occurs on the average of once every 10 years, a 20-year storm occurs on the average of once every 20 years, and so forth.
Access	Usually refers to a road or trail route over which a public agency claims a right-of-way for public use; a way of approach.
Acquired Lands	Lands added to the National Forest System by purchase, transfer, or donation under authority of the Weeks Law or related acts. Also, lands obtained by the Forest Service by exchange for other acquired lands.
Acre-Equivalent	Used to adjust actual acres of habitat improvement or improvement structures to reflect overall habitat benefits derived. It reflects the zone of influence of the habitat improvement for the target species. For example, a single water development for upland game birds has an acre equivalent of 160, whereas a single water structure for big game has a value of 640 because it has a larger zone of influence for the more mobile big game animals.
Acre-foot	A measure of water or sediment volume, equal to the amount which would cover an area of 1 acre to a depth of 1 foot (i.e., 43,560 cubic feet or 325,851 gallons).
Activity	Actions, measures, or treatments undertaken that directly or indirectly produce, enhance, or maintain forest and rangeland outputs or achieve administrative environmental quality and objectives. Forest Service activity definitions, codes, and units of measure are contained in the Management Information Handbook (FSH 1309.11).
Activity Fuels	Debris generated from management activity such as firewood gathering, precommercial thinning, timber harvesting, and road construction.
Administrative unit	An area under the administration of one line officer, such as a District Ranger, Forest Supervisor, or Regional Forester.
Age Class	An interval, usually 10 to 20 years, into which the age ranges of vegetation are divided for classification or use.
Age Class Distribution	The location and/or proportionate representation of different age classes in a forest
Airshed	A geographic area that, because of topography, meteorology, and climate, shares the same air.
All-Terrain Vehicle (ATV)	A vehicle characterized by its ability to negotiate most kinds of terrain by virtue of traction devices such as wide tracks; large, low-pressure rubber tires; and/or four-wheel drive.
Allocation Zones	Allocation zones are defined two ways. In the FEIS model, allocation zones are equivalent to management areas and parts of management areas. In the DEIS model and for implementation and monitoring, allocation zones are defined on the basis of subwatersheds or groupings of several subwatersheds in the main watershed.
Allotment	An area of land on which grazing may be allowed by permit.
Allotment Classification	Categories of individual range allotments based on what is actually occurring to the resources on the area. Classification is not fixed, it can be raised or lowered by management intensity or other commitments. The definitions of allotment classification are:  QI (Quality Intensive Management) - specific resource use and protection goals are being met, as specified in an approved allotment management plan (AMP). Resource damage is not occurring. Techniques and systems are used to optimize forage production and employed to the extent possible considering multiple use constraints. Grazing use on National Forest System lands may be coordinated with grazing on associated public and private lands. QE (Quality Extensive Management) - specific resource use and protection goals set forth in an approved AMP are being met. Resource damage is not occurring. It is not economically efficient or physically feasible to optimize forage use at the present time. Extensive management can be either an intermediate step, prior to implementation of intensive management, or it may be the

ultimate goal for the allotment.

PA (Vacant) - allotments where forage IS available, but which have no obligation for permitted livestock use as the result of administrative actions such as confirmation of a waiver to the United States.

PB (Underdeveloped) - allotments which have the potential to be managed under a quality management strategy. Forage utilization is less than the maximum allowable due to one or more of the following: (1) lack of grazing permittee interest/participation, (2) lack of total AMP implementation, such as range improvements, (3) poor coordination with timber management activities, (4) lack of reliable range analysis data, (5) lack of an approved AMP, and (6) lack of funding to implement quality management.

PC (Basic Resource Damage) - basic resource damage is occurring. Analysis or evaluation indicates that one or more of the following conditions exist and livestock use on the allotment is or has been a major factor contributing to this condition.

1. Maximum summer water temperatures are elevated above State Standards or other approved criteria on Streamside Management Unit (SMU) class I or II streams and this is largely due to the loss of shade-producing vegetation in the allotment.
2. Management-induced instability (loss of stabilizing streambank vegetation) exceeds 20 percent of the total miles of stream (SMU classes I-IV) in an allotment.
3. Gully development of sufficient size to lower the seasonally saturated zone and change the plant community type is occurring.
4. Soil condition rating on 25 percent or more of Key Areas is rated poor or very poor.

PD (Other Resource Damage) - adverse impacts on resources other than the basic soil and water resources are occurring. These impacts are the result of resource management objectives not being met. An allotment will be classified as PD when 10 percent or more of its area meets this criteria. Damage to vegetation is based on use in excess of that planned.

Allotment  
Management Plan

The document that contains the action program needed to manage the rangeland resource for livestock grazing with consideration given to soil, watershed, wildlife, recreation, timber, and other resources on lands within a range allotment.

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 plan. This quantity is usually expressed on an annual basis as the 'average annual allowable sale quantity' (36 CFR 219.3)

Alternative  
Amenity

One of several policies, plans, ways, or projects proposed for decision making.

An object, feature, quality, or experience that gives pleasure or is pleasing to the mind or senses. Amenity value is typically used in land use planning to describe those resource properties for which market values (or proxy values) are not or cannot be established.

Anadromous Fish

Those species of fish that mature in the sea and migrate into streams to spawn. Salmon and steelhead are examples.

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 for those goods and services.

Animal Unit Month  
(AUM)

The unit of measure of the feed required for an animal unit (which is defined as a mature cow weighing 1,000 lbs.) on the range for 1 month. This is further defined as 800 pounds of air-dried forage.

Anomalies  
Appropriated  
Funds  
Appropriate

A deviation from the common rule, type, or form. An incongruity or inconsistency.

Monies authorized by an act of Congress which permit Federal agencies to incur obligations and to make payments out of the U S. Treasury for specified purposes.

The planned strategy for Suppression action (in terms of kind, amount, and timing) on a wildfire

Suppression Response	which most efficiently meets fire management direction under current and expected burning condition. The response may range from a strategy of prompt control to one of containment or confinement. The spectrum of responses may be used on one specific incident.
Aquatic Ecosystems	Stream channels, lakes, marshes or ponds, and the plant and animal communities they support.
Aquifer	A geological formation or Structure that contains water in sufficient quantity to supply needs for water development.
Archeology	The scientific study of the physical characteristics of cultural resources undertaken to describe and explain former ways of life.
Artifact	An object made or modified by humans.
Available Forage	Forage which can be reached and utilized by grazing or browsing animals (assumed to be palatable to one class of animal or another).
Available Forest Land	Land which has not been legislatively or administratively withdrawn by the Secretary of Agriculture or Forest Service Chief from timber production.
Average Daily Traffic (ADT)	The average 24-hour volume of traffic, being the total volume of traffic during a Stated period divided by the number of days in that period.
Avoidance Areas	Land areas that pose particular land use or environmental impacts which would be difficult or impossible to mitigate. Establishment and use of corridors conflict with land use or land management objectives. Examples include (1) specially managed areas such as developed recreation sites and Research Natural Areas: (2) environmentally sensitive areas such as special wildlife areas and wetlands: (3) archaeological and historical sites: and (4) areas with specific visual quality objectives which conflict with facility placement.

## B

Background	The distant part of a landscape, picture, etc ; surroundings, especially those behind something and providing harmony or contrast; surrounding area or surface. Area located from 3-5 miles to infinity from the viewer.
Bald Eagle Management Areas (BEMA'S)	Areas managed for the protection of the threatened and endangered bald eagle. BEMA's provide nesting and roosting habitat for the bird on each plot.
Basal Area	The area of the cross-section of a tree stem near the base, generally at breast height and inclusive of bark.
Base Sale	A timber sale schedule formulated on the basis that the quantity of timber planned for Schedule sale and harvest for any future decade is equal to or greater than the planned sale and harvest for the preceding decade, and this planned sale and harvest for any decade is not greater than the long-term sustained-yield capacity (36 CFR 219.3).
Basic Resource	One of the principal resources; a resource upon which the production of other resources is dependent; e.g., the production of vegetation is dependent upon basic resources such as soils and water.
Benchmark	The analytical basis from which the alternatives were developed. The use of assessed land capability as a basis from which to estimate the effects of alternative patterns of management on the land.
Benchmark	Reference points that define the bounds within which feasible management alternatives can be developed. Benchmarks may be defined by resource output or economic measures.
Benefit (Value)	Inclusive terms used to quantify the results of a proposed activity, project or program expressed or monetary of nonmonetary terms. Also: <ol style="list-style-type: none"> <li>1. <i>Direct benefit</i> - A primary benefit that responds to specified objectives of the policy, program, project, or expenditure.</li> <li>2. <i>Induced benefit</i> - A primary benefit that is incidental to the objectives of the policy, program, project, or expenditure.</li> </ol>

	3. <i>Primary benefit</i> - A benefit accruing to resource owners from a primary output and that may be direct or induced or may be a residual asset. Primary benefits are components of net public benefits.
	4. <i>Secondary benefit</i> - A benefit accruing to parties other than the resource owners, including effects on local, Regional, and national economies and on consumers of outputs Secondary benefits are not necessarily included in net public benefits.
Benefit/Cost Ratio	A measure of economic efficiency computed by dividing total discounted primary benefits by total discounted economic costs.
Best Management Practices (BMP's)	Methods, measures, or practices selected by an agency to meet its nonpoint source control needs. BMP's include, but are not limited to, structural and nonstructural controls and operation and maintenance procedures BMPs can be applied before, during, and after pollution-producing activities to reduce or eliminate the introduction of pollutants into receiving waters (40 CFR 130.2).
Big Game	Large animals that are hunted for sport. On the Umatilla N.F., these include Rocky Mountain elk, mule deer, white-tailed deer, bighorn sheep, and black bear.
Big Game Summer Range	A range, usually at higher elevation, used by deer and elk during the summer. Summer ranges are usually much more extensive than winter ranges.
Big Game Winter Range	A range, usually at lower elevation, used by migratory deer and elk during the winter months: usually more clearly defined and smaller than summer ranges.
Biological Control	A method to control insect populations or tree diseases through the use of applied technology. Also used in noxious plant control.
Biological Growth Potential	The average net growth attainable in a fully stocked natural forest stand.
Biological Potential	The maximum production of a selected organism that can be attained under optimum management.
Biomass	The total quantity (at a given time) of living organisms of one or more species per unit of space (species biomass), or of all the species in a biotic community (community biomass).
Board Foot (BF)	The amount of wood equivalent to a piece of wood 1 foot by 1 foot by 1 inch thick.
Board Foot/Cubic Foot Conversion Ratio	Both board foot and cubic foot volumes can be determined for timber stands. The number of board feet per cubic foot of volume varies with tree species, diameter, height, and form factors A specific factor by species is applied to the cubic foot FORPLAN outputs to give board foot estimates.
Broadcast Burn	A prescribed fire which is allowed to burn over a designated area within well-defined boundaries for reduction of fuel hazard, as a silvicultural treatment, or both.
Browse	Twigs, leaves, and young shoots of trees and shrubs on which animals feed: in particular, those shrubs which are used by big game animals for food
Brush	A growth of shrubs or small trees usually of a type undesirable to livestock or timber management.
Bulk Density	The mass of dry soil per unit volume. Volume is determined before drying to a constant weight at 105°C. This figure is corrected for weight and volume of coarse fragments greater than 2mm in diameter.

## C

Cable Logging	Refers to methods used to skid or pull logs to a central landing or collection area by a cable connected to a remote power source.
Canopy	The more-or-less continuous cover of branches and foliage formed collectively by the crown of adjacent trees and other woody growth.
Canopy Closure	The progressive reduction of space between tree crowns as they spread laterally: a measure of the percent of potential open space occupied by the collective tree crowns in a stand.
Capability	The potential of an area of land to produce resources, supply goods and services, and allow resource uses under an assumed set of management practices and at a given level of

	management intensity. Capability depends upon current conditions and site conditions, such as climate, slope, landform, soils, and geology, as well as on the application of management practices, such as silviculture or protection from fire, insects, and disease.
Capability Area	Geographic delineations used to describe characteristics of the land and resources in integrated forest planning. Capability areas may be synonymous with ecological land units, ecosystems, or land response units.
Capital Formation	As used in IMPLAN is defined as the value of purchases from sectors both inside and outside the Region used by individuals, governments, and industries in the area as investment (land, plant, and equipment used in production processes).
Capital Investment	An input that increases the stock of natural or manmade resources (assets) needed to maintain or increase the flow of outputs in the future. Benefits resulting from capital investments are normally recouped in a time period in excess of 1 year.
Carrying Capacity	The maximum rate of animal stocking possible without inducing damage to vegetation or related resources. This stocking level may vary from year to year because of fluctuating forage production.
Cavity	The hollow excavated in trees by birds or other natural phenomena; used for roosting and reproduction by many birds and mammals.
Cavity Excavator	An animal that excavates a cavity in wood for nesting or roosting.
Cavity Nesters	Wildlife species that nest in cavities.
Channel or Stream Scour	Erosion of the channel bottom caused by high flows of water, loss of channel stability, or debris torrents.
Characteristic Landscape	The naturally established landscape within a scene or scenes being viewed.
Chargeable Timber Volume	All volume included in the growth and yield projections for the selected management prescriptions used to arrive at the allowable sale quantity, based on regional utilization standards.
Charred Log	To burn the surface of; scorch; to reduce to charcoal by incomplete combustion (Morris 1976).
Clean Air Act	The 1963 Clean Air Act legislation as adopted by Congress and amended in 1967, 1969, 1974, and 1977.
Clearcutting	The harvesting in one cut of all merchantable trees on an area for the purpose of creating a new, even-aged stand. The area harvested may be a patch, strip, or stand large enough to be mapped or recorded as a separate class in planning for sustained yield. Advanced regeneration may or may not be removed, depending on its condition and management objectives.
Climatic Regimes	A generalized climatic classification which applies to a specific land area; generally that area can be expected to experience that kind of climate in any given year.
Climax	The culminating stage in plant succession for a given site where the vegetation has reached a highly stable condition.
Climax Species	Those species that dominate the stand, either in numbers per unit area or in biomass, at climax.
Closure	An administrative order restricting either location, timing, or type of use in a specific area.
Code of Federal Regulations (CFR)	A codification of the general and permanent rules published in the Federal Register by the Executive departments and agencies of the Federal Government.
Commercial Forest Land	See Timber Classification.
Commercial Thinning	Any type of tree thinning that produces merchantable material at least equal in value to the direct costs of harvesting.
Commodity	A transportable resource product with commercial value: all resource products that are articles of commerce.
Common Varieties	Nonmineralized sand, gravel, stone, etc. (see Mineral Materials).
Communication sites	Areas designated for the operation of equipment which transmits and receives radio signals (excluding television aerials and antennas) for individual pickup of programming, and passive reflectors.



Community Cohesion	The degree of unity and cooperation within a community in working toward shared goals and solutions to problems.
Community Stability	A community's capacity to handle change without major hardships or disruptions to component groups or institutions. Measurement of community stability requires identification of the type and rate of proposed change and an assessment of the community's capacity to accommodate that level of change.
Compaction	The packing together of soil particles by forces exerted at the soil surface, resulting in increased soil density.
Concern	A point, matter, or question raised by management that must be addressed in the planning process.
Condition Class	(1) Timber: a grouping of timber strata into size/age/stocking classes for Forest planning. (2) Range: one of a series of arbitrary categories used to classify range conditions, usually expressed as excellent, good, fair, or poor.
Confine (a Fire)	To limit fire spread within a predetermined area principally by use of natural or preconstructed barriers or environmental conditions. Suppression action may be minimal and limited to surveillance under appropriate conditions.
Conflagration	A large destructive wildfire.
Congressionally Classified and Designated Areas	Areas that require Congressional enactment for their establishment, such as national wildernesses, national wild and scenic rivers, and national recreation areas.
Constraint	In FORPLAN, a restriction or limit (either ceiling or floor) which may be placed on the level of inputs to or outputs from a forest.
Consumptive Use	A use of resources that permanently reduces the supply, such as mining (also see Nonconsumptive Use).
Contain (a Fire)	To surround a fire, and any spot fires therefrom, with control line as needed, which can reasonably be expected to check the fires' spread under prevailing and predicted weather conditions.
Control (a Fire)	To complete the control line around a fire, any spot fires therefrom, and any interior islands to be saved: burn out any unburned area adjacent to the fire side of the control line; and cool down all hot spots that are immediate threats to the control line, until the line can reasonably be expected to hold under foreseeable conditions.
Conversion Period	The duration of a change from one silvicultural system to another or from one tree species to another.
Corridor	A linear strip of land identified for the present location of transportation or utility rights-of-way within its boundaries, which has ecological, technical, economic, social, or similar advantages over other areas for the present or future location of transportation or utility routes (see Utility and/or Transmission Corridor).
Corridor Viewshed	The total landscape seen or potentially seen from all or a logical part of a travel route, use area, or water body.
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 costly manner. Cost efficiency is usually measured using present net value, although use of benefit-cost ratios and rates-of-return may be appropriate.
Costs	<ol style="list-style-type: none"> <li>1. <i>Direct cost</i> - A cost that directly contributes to the production of the primary outputs of an activity, project, or program.</li> <li>2. <i>Economic cost</i> - Total fixed and variable costs for inputs, including costs incurred by other public parties and, if appropriate, opportunity costs and cost savings.</li> <li>3. <i>Fixed cost</i> - A cost that is committed for the time horizon of planning or the decision being considered. Fixed costs include fixed ownership requirements, fixed protection, short-term maintenance, and long-term planning and inventory costs.</li> </ol>

	4. <i>Investment cost</i> - A cost of creating or enhancing capital assets, including costs of administrative or common-use transport facilities and resource management investments
	5. <i>Joint cost</i> - A cost contributing to the production of more than one type of output.
	6. <i>Non-Forest Service cost</i> - A cost of investment and operating activities paid by cooperators or other non-Forest Service agencies which are part of Forest Service management programs, or which contribute to the outputs included in the analysis.
	7. <i>Opportunity cost</i> - The value of a resource's foregone net benefits in its most economically efficient alternative use.
	8. <i>Unit cost</i> or <i>cost per unit</i> - Total cost of production divided by the number of units produced.
	9. <i>Variable cost</i> - A cost that varies with the level of controlled outputs in the time horizon covered by the planning period or decisions being considered.
Cover	Vegetation used by wildlife for protection from predators, to ameliorate conditions of weather, or in which to reproduce.
Cover-Forage Ratio	The ratio, as a percent, of the amount of area in cover condition to that area in forage condition; the criteria by which potential deer and elk use of an area is judged.
Created Opening	Created opening is an opening in the Forest created by the silvicultural practices of shelterwood regeneration cutting at the final harvest, clearcutting, seed tree cutting, or group selection cutting
Cubic Foot Per Second (cfs or ft <sup>3</sup> /s)	The rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second. This is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute.
Culmination of Mean Annual Increment (CMAI)	The age at which a stand of trees no longer increases in average annual growth.
Cultural Resources	Physical remains of districts, sites, structures, buildings, networks, or objects used by humans in the past. They may be historic or prehistoric, archaeological, or architectural in nature. Cultural resources are land based and are nonrenewable.
Cumulative Effects	The impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.
Cutting Cycle	The planned lapse of time between successive cuttings in a stand while using uneven-aged management practices.

## D

Data	Any recorded measurements, facts, evidence, or observations reduced to written, graphical, tabular, or computer form. The term implies reliability, and therefore provides an explanation of source, type, precision, and accuracy.
Data Recovery	The collection of information through any of a variety of techniques (e.g., photography, mapping, archaeological excavation) for purposes designed to recover representative data from a cultural resource prior to its disturbance or destruction.
Dead and Down Woody Material	All woody material, from whatever source, that is dead and lying on the forest floor.
Decadent (Stands)	Decaying; deteriorating.
Decision Criteria	Essentially the rules or standards used to evaluate alternatives. They are measurements or indicators that are designed to assist a decision maker in identifying a preferred choice from an array of possible alternatives.
Deferred Rotation	Deferred grazing; deferred utilization; withholding livestock from a range to allow the forage to

Demand	reach a certain stage of growth, stocking, and vigor for those species that govern utilization. The amount of an output that users are willing to take at a specified price, time period, and condition of sale.
Demand Analysis	A study of the factors affecting the schedule of demand for an output, including the price-quantity relationship, if applicable.
Departure	A schedule which deviates from the principle of nondeclining flow by exhibiting a planned decrease in the timber sale and harvest schedule at any time in the future.
Dependent Communities	Communities whose social, economic, or political life would change in important respects to market or nonmarket outputs from the national forest were substantially decreased.
Design Standard	Approved design and construction specifications used mainly for recreation facilities and roads- includes specified materials, colors, dimensions, etc.
Designated Area (Air Quality)	Those areas delineated in the Oregon and Washington Smoke Management Plans as principal population centers of air quality concern.
Desirable Residual	The remaining vegetation after application of harvest cutting methods that meets management area objectives. The vegetation may be trees, shrubs, grass, or a combination.
Detrimental Compaction	Compaction of soil increases soil bulk density and decreases porosity as a result of the application of mechanical forces, such as weight and vibration. Detrimental compaction exceeds the limits described below. Because of the unique physical properties and management problems (of volcanic ash and pumice soils), a different criterion for determining detrimental compaction has been established for them. Standards are as follows: 1. Volcanic ash/pumice soils - An increase in soil bulk density of 20 percent or more over the undisturbed level. 2. Other soils - An increase in soil bulk density of 15 percent or more over the undisturbed level, a macropore space reduction of 50 percent or more, and/or a reduction below the 15 percent level as measured by an air permeameter.
Detrimental Displacement	Soil displacement is the removal and horizontal movement of soil from one place to another by mechanical forces, such as blades. Detrimental displacement is the removal of more than 50 percent of the topsoil or humus enriched AI and/or AC horizons from an area of 100 square feet or more which is at least 5 feet in width. Mixing of surface soil layers by discing or disc-plow operations, or removal of surface soil layers by hand scalping is not considered detrimental displacement.
Detrimental Puddling	Soil puddling is a physical change in soil properties due to shearing forces that destroy soil structure and reduce porosity. Detrimental puddling can be observed as vehicle tracks when soil is molded and when depth of rutting has reached 6 inches or more.
Developed Recreation	Recreation that requires facilities that, in turn, result in concentrated use of an area Examples are campgrounds and ski areas; facilities in these areas might include roads, parking lots, picnic tables, toilets, drinking water, ski lifts and buildings.
Development Scale	A description of the levels of site modification for developed recreation sites and facilities:  1 -- PRIMITIVE Minimum Site Modification - Rustic or rudimentary improvements designed for protection of the site rather than comfort of the users. Use of synthetic materials excluded. Minimum controls are subtle. No obvious regimentation. Spacing informal and extended to minimize contacts between users. Motorized access not provided or permitted. 2 -- SEMI-PRIMITIVE (Motorized and Nonmotorized) Little Site Modification - Rustic or rudimentary improvements designed primarily for protection of the site rather than the comfort of the users. Use of synthetic materials avoided. Minimum controls are subtle. Little obvious regimentation. Spacing informal and extended to minimize contacts between users. Motorized access provided or permitted. Primary access over primitive roads Interpretive services informal, almost subliminal. 3 -- ROADED NATURAL

Site Modification Moderate - Facilities about equal for protection of site and comfort of users. Contemporary/rustic design of improvements is usually based on use of native materials. Inconspicuous vehicular traffic controls usually provided. Roads may be hard surfaced and trails formalized. Development density about three family units per acre. Primary access may be over high standard roads. Interpretive services informal, but generally direct.

#### 4 -- RURAL

Site Heavily Modified - Some facilities designed strictly for comfort and convenience of users. Luxury facilities not provided. Facility design may incorporate synthetic materials. Extensive use of artificial surfacing of roads and trails. Vehicular traffic control usually obvious. Primary access usually over paved roads. Development density three-five family units per acre. Plant materials usually native. Interpretive services often formal or structured.

#### 5 URBAN

High degree of site modification. Facilities mostly designed for comfort and convenience of users and usually include flush toilets; may include showers, bathhouses, laundry facilities, and electrical hookups. Synthetic materials commonly used. Formal walks or surfaced trails. Regimentation of users is obvious. Access usually by high-speed highways. Development density five or more family units per acre. Plant materials may be foreign to the environment. Formal interpretive services usually available. Designs formalized and architecture may be contemporary. Mowed lawns and clipped shrubs not unusual.

Diameter at Breast Height (d.b.h.)	Tree diameter measured at 4 feet 6 inches above ground on the uphill side of the tree.
Direct Habitat Improvement	Habitat manipulations primarily for the benefit of wildlife and fish.
Discount Rate	An interest rate that represents the cost or time value of money in determining the present value of future costs and benefits. A 'real' discount rate is one adjusted to exclude the effects of inflation.
Discounting	The practice of placing a lesser value (economic or other) on future events than on present events for the purpose of comparison. An item received today is seen to be worth more than an identical item received next year. Discounting refers only to the timing of an event and should not be confused with reduced values based on the uncertainty of future events nor implied quality changes over time.
Dispersed Recreation	A general term referring to recreation use outside a developed recreation site that includes activities such as scenic driving, hunting, backpacking, and any recreation in primitive environments.
Distance Zones	Areas of landscapes denoted by specified distances from the observer. Used as a frame of reference with which to discuss landscape characteristics or activities of man.
District (Cultural)	A group of cultural resources which, based on geographical proximity and shared characteristics, form a distinctive unit relative to nomination to the National Register of Historic Places.
Diversity	The distribution and abundance of different plant and animal communities and species within the area covered by a land and resource management plan (also see Edge).
Drainage Area of a Stream	Measured in a horizontal plane, that area enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above a specified point.
Drainage Basin	Part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.
Duff	Organic matter in various stages of decomposition on the floor of the forest.

## E

Early Forest Succession	The early stage or condition of a plant community that occurs during its development from bare ground to climax.
Economic Efficiency	The usefulness of inputs (costs) to produce outputs (benefits) and effects when all costs and benefit that can be identified and valued are included in the computations. Economic efficiency is usually measured using present net value, though use of benefit-cost ratios and rates-of-return may sometimes be appropriate.
Economic Growth	Increased economic output in real terms over time.
Economic Impacts	<ol style="list-style-type: none"> <li>1. Direct Economic /impact - Effects caused directly by forest product harvest or processing or by forest uses.</li> <li>2. Indirect Economic Impact - Effects that occur when supporting industries sell goods or services to directly affected industries.</li> <li>3. Induced Economic /impact - Effects that occur when employees or owners of directly or indirectly affected industries spend their income within the economy.</li> </ol>
Ecosystem	An interacting system of organisms considered together with their environment; for example, marsh, watershed, and lake ecosystems.
Ecotone	The area influenced by the transition between plant communities or between successional stages or vegetative conditions within a plant community.
Edge	Where plant communities meet or where successional stages or vegetative conditions within plant communities come together.
Effective Ground Cover	All living or dead herbaceous or woody materials and rock fragments, greater than three-fourths of an inch in diameter, in contact with the ground surface. Includes tree or shrub seedlings, grass, forbs, litter, chips, and so forth.
Effects	Environmental consequences resulting from a proposed action. Included are direct effects, which are caused by the action and occur at the same time and place; and indirect effects, which are caused by the action and are later in time or further removed in distance, but which are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems. Effects and impacts as used in this statement are synonymous. Effects include ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic quality, historic, cultural, economic, social, or health whether direct, indirect, or cumulative. Effects also may include those resulting from actions that may have both beneficial and detrimental effects, even if on balance the agency believes that the effects will be beneficial (40 CFR 1508.8).
Elk Calving Habitat	A habitat used by elk for calving, usually located on spring-fall range in areas of gentle slope, contains forage areas and hiding and thermal cover close to water.
Empirical Yield Table	A table reflecting the existing standing timber volumes today and how they would grow in the future, under various timber management regimes.
Employment	Labor input into a production process, measured in the number of person-years or jobs. A person-year is 2,000 working hours by one person working year-long or by several persons working seasonally.
Endangered Species	Any species of animal or plant that is in danger of extinction throughout all or a significant portion of its range Plant or animal species identified by the Secretary of the Interior as endangered in accordance with the 1973 Endangered Species Act.
Enhancement	A short-term management alternative which is done with the express purpose of increasing positive visual variety where little variety now exists.
Environmental Analysis	An analysis of alternative actions and their predictable short- and long-term environmental effects, incorporating the physical, biological, economic, social, and environmental design arts

	and their interactions.
Environmental Assessment	The concise public document required by the regulations for implementing the procedural requirements of the National Environment Policy Act. (40 8 FR 1508.9, 2)
Environmental Impact Statement (EIS)	A statement of the environmental effects of a proposed action and alternatives to it. It is required for major federal actions under Section 102 of the National Environmental Policy Act (NEPA), and released to the public and other agencies for comment and review. It is a formal document that must follow the requirements of NEPA, the Council on Environmental Quality (CEQ) guidelines, and directives of the agency responsible for the project proposal.
Erosion	(1) The wearing away of the land surface by running water, wind, ice, or other geologic agents, including such processes as gravitation creep; or (2) detachment and movement of soil or rock fragments by water, wind, ice, or gravity The following terms are used to describe different types of erosion: <i>Accelerated Erosion</i> - Erosion which is much more rapid than natural erosion, with the increase in erosion rate resulting primarily from the influence of human activities, or, in some cases, of other events that expose mineral soil surfaces such as wildfire. <i>Gully Erosion</i> - The erosion process whereby water accumulates in narrow channels, and over short periods, removes the soil from this narrow area to considerable depths, ranging from 4 inches to as much as 75 to 100 feet. <i>Rill Erosion</i> - An erosion process in which numerous small channels less than 4 inches deep and 6 inches wide are formed. <i>Sheet Erosion</i> - The removal of a fairly uniform layer of soil from the land surface by runoff water.
Escaped Fire Situation Analysis	A decision analysis of those factors influencing suppression of an escaped fire from which a plan of action will be developed. The analysis includes the development of alternative suppression strategies and the net effect of each.
Esthetics (Aesthetics)	Generally, the study, science, or philosophy dealing with giving visual pleasure; beauty and with judgments concerning beauty; and the theory of perception or of susceptibility.
Eutrophic Evaluation (Cultural)	Habitats, particularly soils and water, that are rich or adequate in nutrients. Assessment by a professional cultural resource specialist of the scientific, social, and historical significance of a cultural resource undertaken to determine whether or not it meets the criteria for the National Register of Historic Places.
Evapotranspiration	The water which is lost to the atmosphere from a vegetated surface due to evaporation from the soil and water surfaces and transpiration by living vegetation.
Even-Aged Management	The application of a combination of actions that results in the creation of stands of trees of essentially the same age. Managed even-aged forests are characterized by a distribution of stands of varying ages (and therefore, tree sizes) throughout the forest area. The age difference 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.
Even-Aged Stands	Stands in which all trees are of about the same age. (A spread of 10 to 20 years is generally considered one age class.) Cutting methods producing even-aged stands are clearcut, shelterwood, or seed tree systems.
Exclusion Areas	Land areas determined to be unavailable for corridor allocation or facility siting. These include only those areas with a legal, congressional mandate that excludes linear facilities (i.e., wilderness).
Extensive Forest Management	A low investment level of management on regulated timberlands that requires initial harvest, regeneration, and final harvest. Some precommercial thinning may be done to prevent stagnation and disease buildup.
Existing Visual	See Visual Condition.

Conditions (EVC)

**F**

- Final Removal Harvest: The removal of the last seed bearers or shelter trees after regeneration is established under a shelterwood, or seed tree cutting method.
- Fire intensities: Rate of heat energy released during combustion, usually expressed in BTU/second per unit length of fire front (foot). Intensity levels: Low, 0-2ft.: moderate, 2 4 ft.; high, 4+ feet.
- Fire Management: All activities required for the protection of resources and values from fire, and the use of fire to meet land management goals and objectives.
- Fish Habitat Level: Coefficients for anadromous fish in terms of the number of smolts, adult fish, sport fishing use, and commercial harvest are the result of eight (8) levels of investment in habitat enhancement as:

<u>Management Level</u>	<u>1st Decade Investment M\$/Yr.</u>
1	0
2 and 3	177.4
5, 6, and 7	397.2
8	433.2
	537.7

- Fisheries Habitats: Streams, lakes, and reservoirs that support fish populations.
- Floodplain: The lowland and relatively flat areas adjoining inland and coastal waters (including debris cones and flood-prone areas of offshore islands) including, at a minimum, those areas subject to a 1 percent or greater chance of flooding in any given year (1 00-year recurrence).
- Forage: All browse and nonwoody plants available to livestock or wildlife for grazing, or harvested for feed.
- Forage Areas: All browse and nonwoody plant areas available to livestock or game in addition to forest stands that do not qualify as either hiding or thermal cover and all natural and manmade openings less than 6 1/2 feet tall.
- Foreground: A term used in visual management to describe the visible terrain immediately adjacent to a high-value scenic area, recreation facility, or forest highway (see Background, Middle Ground).
- Forest: A forest is an extensive plant community of shrubs and trees in all stages of growth and decay, with a closed canopy, having the quality of self-perpetuation or of development into an ecological climax.
- Forest Land: Land at least 10 percent occupied by Forest trees or formerly having had such tree cover and not currently developed for nonforest use. Lands developed for nonforest use include areas for crops, improved pasture, residential or administrative areas, improved roads by any width, and adjoining road clearings and powerline clearings of any width.
- Forest Program: A forest program is the summary or aggregation of project or activity information that makes up an integrated (multifunctional) course of action for a given level of funding on a national forest that is consistent with the Forest Plan.
- Forest Residues (Logging): The unused portions of sawtimber and pole timber trees cut, or trees cut or killed by logging.
- Forest Service Handbook (FSH): For Forest Service use, directives that provide detailed instructions on how to proceed with a specialized phase of a program or activity.
- Forest Service Manual (FSM): A system of manuals which provides direction for Forest Service activities.
- Forest System Roads: Roads that are part of the Forest development transportation system, which includes all existing and planned roads as well as other special and terminal facilities and designated as Forest development transportation facilities (also see Roads).
- Forest Types: A classification of forest land based upon the tree species presently forming a plurality of basal

	area stocking in live trees.
FORPLAN	A linear programming system used for developing and analyzing forest planning activities.
Four-wheel Drive Way	A forest development road included in the forest development transportation plan and commonly used by four-wheel drive, high-clearance vehicles with a width greater than 40 inches.
Free-to-Grow	A term used by silviculturalists to indicate that trees are free of growth restraints; the most common of which is competing over-topping or competing vegetation.
Fuel Loading	See Residue Loading
Fuel Management	The practice of planning and executing treatment or control of any vegetative material which adversely affects meeting fire protection or resource management goals and objectives.
Fuel Treatment	The rearrangement or disposal of natural or activity fuels (generated by management activity, such as slash left from logging) to reduce fire hazard. Fuels are defined as both living and dead vegetative materials consumable by fire.
Fuels	Wild land vegetative material which can burn.

## G

G-T Permit	Special-use permit issued under the Granger-Thye Act.
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.
Geomorphology	The science that deals with land and submarine relief features of the earth's surface and seeks a genetic interpretation of them, using the principles of physiography in its descriptive aspects and dynamic and structural geology in its explanatory phases.
Geothermal	Of or pertaining to the internal heat of the earth.
Goal	A concise statement that describes a desired condition to be achieved sometime in the future. It is normally expressed in broad, general terms and is timeless in that it has no specific date by which it is to be completed. Goal statements form the principal basis from which objectives are developed.
Goods	<ol style="list-style-type: none"> <li>1. <i>Nonmarket Good</i> - An output that is not normally exchanged for money in a market. Usually no market has evolved because ownership of the good is not clear, exclusive use is not possible under current laws, or it is not possible to consistently define good.</li> <li>2. <i>Pubic Good</i> - An output for which it is impractical to impose a charge, either because it must be supplied to all if it is supplied to one, or the costs of collection and control exceed likely revenue.</li> </ol>
Goods and Services	The various outputs, including on-site uses, produced from forest and rangeland resources.
Grass/Forb Mosaic (GTM)	An early forest successional stage where grasses and forbs are the dominant vegetation. Generally, areas that are a mosaic of forested and nonforested lands ranging from fingers of forested lands alternating with nonforested lands, to small patches of forested lands isolated in large tracts of nonforested land. Large portions of these areas are identified as big game winter ranges which occur on steep shallow soils extending from ridgetops to canyon bottoms, and include forested portions which rarely exceed 200 feet in width.
Group Selection Cutting	An uneven-aged management practice that harvest tree groups ranging in size from a fraction of an acre up to about 2 acres. Area cut is smaller than the minimum feasible under even-aged management for a single stand
Guideline	An indication or outline of policy or conduct that is not a mandatory requirement (as opposed to a standard, which is mandatory).

## H



Habitat	The sum total of environmental conditions of a specific place occupied by a wildlife species or a population of such species.
Habitat Capability	The estimated ability of an area, given existing or predicted habitat conditions, to support a wildlife, fish, or plant population. It is measured in terms of potential population numbers.
Habitat Diversity	The distribution and abundance of different plant and animal communities and species within a specific area.
Hardwood	A broad-leaved flowering tree.
Habitat Effectiveness Index (HEI)	A relative value of habitat conditions for Rocky Mountain elk based on the potential of the habitat type to provide cover, the quality of existing cover, and the miles of road open to vehicular traffic.
Hard Snag	A snag composed primarily of sound wood, particularly sound sapwood, that is generally merchantable.
Harvest Cutting Method	A combination of interrelated actions whereby forests are tended, harvested, and replaced. The combination of management practices used to manipulate the vegetation results in forests of distinctive form and character. Harvest cutting methods are classified as even-aged and uneven-aged.
Harvest Dispersion (Factor)	The dispersion of cutting units over the land base in order to meet clearcut size limitations, or other resource constraints. An example of a harvest dispersion constraint is that no more than 25 percent of an analysis area may be harvested in one decade.
Hazard	A description of the fuels complex in terms of kind, volume, arrangement, condition, and location of the fuels.
Herbage	Herbs taken collectively. Nonwoody plant materials.
Hiding Cover for Elk	Any vegetation capable of hiding 90 percent of a standing adult elk from the view of a human at a distance of 200 feet or less; generally any vegetation used by elk for security or escape from danger and at least 6 1/2 feet tall (also see Marginal Cover).
Historic	Refers to the period of time for which there are written records (after European contact). In Region 6, the historic era begins at roughly 1800A.D., with the first explorers who kept journals.
Historic Site	Site associated with the history, tradition, or cultural heritage of national, state, or local interest.
Horizontal Diversity	The diversity in an area that results from the number of plant communities or successional stages or both: the greater their number the greater the horizontal diversity; also, the greater the amount of edge the higher the degree of horizontal diversity.
Hydrology	The scientific study of the properties distribution and effects of water in the atmosphere, on the earth's surface, and in soil and rocks.

I

IMPIAN	A computer-based system used by the Forest Service for constructing nonsurvey input/output models to measure economic impact. The system includes a data base for all counties in the U.S. and a set of computer programs to retrieve data and perform the computational tasks for input/output analysis.
Imports	As used in IMPIAN, imports are defined as purchases of products for use in production of other products and for final consumption from outside the impact area. Includes both imports from other areas of the U.S. and international imports. Competitive imports are the same as local domestic products which are not produced in quantities sufficient to meet local demands or which obtain a share of the local market formerly supplied by local producers. Noncompetitive imports are products not produced locally.
Improved Genetic Stock	Group of plants (trees) that have been improved genetically.
Income	Employee compensation, profits, rents, and other payments to households.
Indicator Species	A wildlife species selected for management because its welfare is presumed to indicate the welfare of other species.

Indirect Outputs	Outputs caused by an action, but which are later in time or farther removed in distance, although still reasonably foreseeable (see Effects).
Individual (Single) Tree Selection	See Uneven-aged Silvicultural Systems.
Induced Outputs	Outputs in the private sector induced by the direct outputs produced on the Forest.
Influence Zone	See Zone of Influence.
Input/Output Analysis	A quantitative study of the interdependence of a group of activities, based on the relationship between inputs and outputs of the activities. The basic tool of analysis is an input-output model for a given period that shows simultaneously for each economic sector the value of inputs and outputs, as well as the value of transactions within each economic sector. It has especially been applied to estimate the effects of changes in Forest output levels on local economic activity.
Instream Flows	A prescribed level (or levels) of streamflow, usually expressed as a stipulation in a permit authorizing a dam or water diversion, for the purpose of meeting National Forest System management objectives.
Integrated Pest Management (IPM)	A process for selecting strategies to regulate forest pests in which all aspects of a pest-host system are studied and weighed. The information considered in selecting appropriate strategies includes the impact of the unregulated pest population on various resource values, alternative regulatory tactics and strategies, and benefit/cost estimates for these alternative strategies. Regulatory strategies are based on sound silvicultural practices and ecology of the pest-host system and consist of a combination of tactics, such as timber stand improvement and selective use of pesticides. A basic principle in the choice of a strategy is that it be ecologically compatible or acceptable.
Intensity of Grazing	The degree of grazing management applied to a piece of land.
Intensive Forest Management	A high investment level of timber management that includes initial harvest, regeneration with genetically improved stock, control of competing vegetation, fill-in planting, precommercial thinning as needed for stocking control, one or more commercial thinnings, and final harvest.
Interdisciplinary Approach	Using the skills of individuals representing two or more areas of knowledge to focus on the same task, problem, or subject.
Interdisciplinary Team (ID Team)	A group of individuals with different training assembled to solve a problem or perform a task. The team is assembled out of recognition that no one scientific discipline is sufficiently broad to adequately solve the problem.
Intermediate cutting	Any removal of trees from a stand between the time of its formation and the regeneration cut. Most commonly applied intermediate cuttings are release, thinning, improvement, and salvage.
Intermingled Ownerships	Lands within the national forest boundaries, or surrounded by national forest lands, that are owned by private interests or other government agencies.
Intermittent Stream	A stream that runs water in most months, but does not run water during the dry season during most years.
Interpretive Services	Visitor information services designed to present educational and recreational values to forest visitors to enhance their understanding, appreciation, and enjoyment of the forest.
Inventory (Cultural)	The process of collecting existing information on known cultural resources and locating and documenting undiscovered cultural resources.
Irretrievable	A term that applies to the loss of production, harvest, or use of natural resources. For example, some or all of the timber production from an area is lost irretrievably while an area is serving as a winter sports site. The production lost is irretrievable, but the action is not irreversible. If the use changes, it is possible to resume timber production.
Irreversible	A term that describes the loss of future options. Applies primarily to the effects of use of nonrenewable resources, such as minerals or cultural resources, or to those factors, such as soil productivity, that are renewable only over long periods of time.
Issue	A point, matter, or question of public discussion or interest to be addressed or decided through the planning process.

## K

**Key Use Area (Wildlife)** The portion of the habitat where use of forage is most pronounced. These areas are essential to the survival and perpetuation of the species as individuals or as a population. Collectively, they are the key to management of the entire range.

## L

**Land Use Allocation** The commitment of a given area of land or a resource to one or more specific uses, for example, to campgrounds or wilderness.

**Landing** Any place where round timber is assembled for further transport, commonly with a change of method.

**Lands Not Appropriate for Timber Production** Includes lands that: (1) Are proposed for resource uses that preclude timber production, such as Wilderness; (2) have other management objectives that limit timber production to the point where management requirements set forth in CFR 219.27 cannot be met; or (3) are not cost efficient over the planning horizon in meeting Forest objectives including timber production.

**Lands Not Suited (Unsuitable) for Timber Production** Includes lands that: (1) are not Forest land as defined in CFR 219.3; (2) are likely, given current technology, to suffer irreversible resource damage to soils productivity, or watershed conditions; (3) cannot be adequately restocked as provided in 36 CFR 21.9.27(c)(3); or (4) have been withdrawn from timber production by an Act of Congress, the Secretary of Agriculture, or the Chief of the Forest Service. In addition, Forest lands other than those that have been identified as not suited for timber production shall be reviewed and assessed prior to formulation of alternatives to determine the costs and benefits of a range of management intensities for timber production.

**Lands Suitable for Timber Production** Includes all lands not classified as either not suited or not appropriate for timber production.

**Leasable Minerals** These minerals include oil, gas, oil shale, coal, potassium, sodium, phosphates, sulphur, and geothermal.

**Lifestyle** The characteristic way people live, indicated by consumption patterns, work, leisure, and other activities.

**Linear Programming** A mathematical method used to determine the cost-effective allocation of limited resources between competing demands when both the objective (e.g., maximize profit or minimum cost) and the restrictions on its attainment are expressible as a system of linear equalities or inequalities.

**Locatable Minerals** These resources include gold, silver, lead, copper, and mercury, which are mined and processed for metals, and some uncommon nonmetallic minerals.

**Log Class** The identification of logs by groups based on their state of decomposition from Class I (recently fallen, bark intact, and solid) to Class V (with advanced decomposition, no bark remaining, and soft).

**Logical Harvest Unit** An area that can be harvested using currently available technology, applied in a prudent manner, while meeting all resource objectives, and is located such that all adjacent timber also falls within logical harvest units.

**Long-Term Sustained-Yield Timber Capacity (LTSYC)** 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 (36 CFR 219.3).

## M

Managed Yield Table	A table showing, for a given species (or species mix) on a given site, the progressive development of managed stand at periodic intervals covering the greater part of its useful life. It usually includes average diameter, basal area, number of trees, standing volume, and harvest volumes for a specific timber management regime.
Management Activity	An activity of man imposed on a landscape for the purpose of harvesting, traversing, transporting, or replenishing natural resources.
Management Area	The land area on which a certain management strategy is applied.
Management Concern	An issue, problem, or a 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, with the associated management prescriptions, and standards and guidelines for attaining them.
Management Indicator Species	A species selected because its welfare is presumed to be an indicator of the welfare of other species using the same habitat. A species whose condition can be used to assess the impacts of management actions on a particular area.
Management Intensity	A management practice or combination of management practices and associated costs designed to obtain different levels of goods and services.
Management Practice	A specific activity, measure, course of action, or treatment.
Management Prescription	See Management Strategy.
Management Requirement (MR)	Minimum standards for resource protection, vegetation manipulation, silvicultural practices, even-aged management, riparian areas, and soil and water diversity to be met in accomplishing National Forest System goals and objectives.
Management Strategy	Management practices and intensity selected and scheduled for application on a management area to attain multiple-use and other goals and Objectives.
Marginal Cover	A vegetative stand comprised of trees 10 or more feet high with an average canopy closure of at least 40 percent and generally capable of obscuring at least 90 percent of a standing adult elk from the view of humans at a distance of 200 feet or less.
Market	The processes of exchanging a good or service for money or other goods or services according to a customary procedure. A market may occur in a specific place or throughout an area by individual transactions.
Market Area	The area from which a market draws or to which it distributes its goods or services and for which the same general price structure and price influences prevail.
Market Resources	Products derived from renewable and nonrenewable resources that have a well-established market value; for example, forage, timber, water, and minerals.
Market Value	The unit price of an output normally exchanged in a market after at least one stage of production. Market value is expressed in terms of prices as evidenced by market transactions.
Mature Stage	One of six recognizable successional stages in coniferous forests of the Blue Mountains in which the stand is primarily composed of or dominated by mature trees in vigorous condition; the stage at which a tree or stand best fulfills the purpose for which it was managed.
Maximum Modification	See Visual Quality Level (VQL).
Mean Annual Increment	The total increment up to a given age divided by that age.
Memorandum of Agreement (Cultural)	A three-party agreement (responsible Forest Service official, State Historic Preservation officer, and executive director of the Advisory Council on Historic Preservation) which documents an agreed upon plan to mitigate a proposed undertakings' adverse effect upon cultural resources listed on or eligible for the National Register of Historic Places.
Middle Ground	The visible terrain beyond the foreground where individual trees are still visible, but do not stand out distinctly from the stand (see Foreground and Background).
Migration Route	A travel route used routinely by wildlife in their seasonal movement from one habitat to another.

Mineral Entry	The filing of a mining claim upon public domain or related land to obtain the right to any minerals it may contain.
Mineral Entry Withdrawal	The exclusion of mining locations and mineral development work on areas required for administrative sites by the Forest Service and other areas highly valued by the public.
Mineral Materials	Deposits such as sand, stone, gravel, and clay.
Mitigation	Mitigation includes: (1) Avoiding the impact altogether by not taking a certain action or parts of an action; (2) minimizing impacts by limiting the degree or magnitude of the action and nS implementation; (3) rectifying the impact by repairing, rehabilitating, or restoring the affected environment; (4) reducing or elimination the impact over time by preservation and maintenance operations during the Me of the action; and (5) compensating for the impact by replacing or providing substitute resources of environments. (40 CFR Part 1508.20).
Mitigation Measures	Actions to avoid, minimize, reduce, eliminate, or rectify adverse impacts of management practices.
Model	A representation of, realty used to describe, analyze, or understand a particular concept. A 'model' may be a relatively simple qualitative description of a system or organization, or a highly abstract set of mathematical equations.
Moderate Grazing Use	A comparative term that indicates the grazing use is between heavy and light use. More specifically it refers to the level of grazing which does not result in visually detracting 'beat out' areas in sensitive landscape areas.
Monitoring	A process to collect significant data from defined sources to identify departures or deviations from expected plan outputs.
Monitoring and Evaluation	The periodic evaluation of Forest Plan management practices on a sample basis to determine how well objectives have been met.
Mortality	In wildlife management, the loss in a population from any cause, including hunter kill, poaching, predation, accident, and disease. In forestry, trees in a stand that die of natural causes.
Multi-Layered Canopy	Forest stand with two or more distinct tree layers in the canopy with an understory or overtopped trees are common. None of the canopy layers are necessarily continuous or closed, but tend to be more or less uniformly distributed across the stand.
Multiple Use	The management of all the various renewable surface resources of the National Forest System so that they are utilized in the combination that will best meet the needs of the American people: making the most judicious use of the land, for some or all of these resources or related services, over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; that some lands will be used for less than all of the resources; and harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output (36 CFR 219.3).

## N

National Forest System (NFS) Lands	Federal lands that have been designated by Executive Order or statute as National Forest, National Grasslands, Purchase Units, and other lands under the administration of the Forest Service, including Experimental Areas, and Land Utilization Project (BankheadJones Title III) lands.
National Recreation Trails (NRT)	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.
National Register of Historical Places	A register of cultural resources of national, state, or local significance maintained by the Department of the Interior.
Natural Forest	The forest that would remain in 50 years r natural processes were allowed to function without

	human influence.
Natural Fuels	Fuels not directly generated or altered by management activities.
Natural Regeneration	Reforestation of a site by natural seeding from the surrounding trees or trees left for seed, or seed stored in the soil or slash. Natural regeneration may or may not be preceded by site preparation.
Net Cash Flow	The difference between the annual receipts of an alternative and costs required to implement that alternative.
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 they can be quantitatively valued or not. Net public benefits are measured by both 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.
Net Receipts	Receipts minus costs.
Net Returns to the Treasury, Net Cash Flow	The difference between the total dollar receipts projected for an alternative and the total budget required to implement the alternative.
Nitrogen-Fixing	Conversion of free nitrogen into combined forms useful in nutrient cycles and other functions in the biosphere.
No Surface Occupancy	A clause used in mineral leases to prevent activities in sensitive areas. Sometimes results in closure of an area and sometimes has little impact if directional drilling can tap resources underlying restricted area.
Nonattainment Areas	An area that has been identified in the State Implementation Plan where at least one of the national air-quality standards is violated.
Nonchargeable Timber Volume	All timber volume not included in the growth and yield projections for the selected management prescriptions used to arrive at the allowable sale quantity.
Noncommodity Outputs	Resource outputs that are not normally bought and sold, or cannot be bought and sold, such as air quality or scenic beauty.
Nonconsumptive Use	That use of a resource that does not reduce its supply; for example, nonconsumptive uses of water include hydroelectric power generation, boating, swimming, and fishing.
Nondeclining Flow (NDF)	A policy governing the volume of timber removed from a national forest, which states that the volume planned for removal in each succeeding decade will equal or exceed that volume planned for removal in the previous decade.
Nonforest Land	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 nonforest use.
Nongame	Species of animals not hunted for sport.
Nointerchangeable	Noninterchangeable components (NIC's) are defined as increments of the suitable land base and their contribution to the allowable sale quantity (ASQ) that are established to meet Forest Plan objectives. NIC's are identified as parcels of land and the type of timber thereon which are differentiated for the purpose of Forest Plan implementation. The total ASQ is derived from the sum of the timber volumes from all NIC's. The NIC's cannot be substituted for each other in the timber sale program. Some conditions which may characterize a particular NIC are. (1) species marketability, (2) dead or live timber, (3) timber size class, and (4) operability.
Nonmarket Resources	Products derived from national forest resources that do not have a well-established market value; for example, recreation, wilderness, and wildlife.
Nonmarket Value	The unit price of a nonmarket output normally not exchanged in a market at any stage before consumption; it is thus necessary to impute nonmarket value from other economic information.
Nonmarket Valued Outputs	Assessed value of a good or service which is not traded in the market place and has no market value. Because it is not bought and sold, some measure other than price must be used in

	establishing the value.
Nonpoint Source Pollution	Pollution whose source is general rather than specific in location. It is widely used in reference to agricultural and related pollutants-for example, production of sediments by logging operations, agricultural pesticide applications, or automobile exhaust pollution.
Nonpriced outputs	Nonpriced outputs are those for which there is no available market transaction evidence and no reasonable basis for estimating a dollar value. Subjective nondollar values are given to nonpriced outputs.

## O

Objective	A concise, time-specific statement of measurable planned results that respond to preestablished goals. An objective forms the basis for further planning to define the precise steps to be taken and the resources to be used in achieving identified goals.
Off-Highway Vehicle (OHV)	A general term describing all motorized vehicles capable of off-highway travel during winter or summer. Includes 4x4's ATV's, dirt bikes, and snowmobiles.
Off-Road Vehicles (ORV)	Vehicles such as motorcycles, all-terrain vehicles, four-wheel drive vehicles, and snowmobiles. Term superseded by Off-Highway Vehicle (OHV).
Old Growth Habitat (OG)	See Successional Stage.
Old Growth Stand (Old Growth)	Any stand of trees 10 acres or greater generally containing the following characteristics: (1) Contain mature and overmature trees in the overstory and are well into the mature growth stage; (2) will usually contain a multilayered canopy and trees of several age classes; (3) standing dead trees and down material are present; and (4) evidences of man's activities may be present, but do not significantly alter the other characteristics and would be a subordinate factor in a description of such a stand.
Open to Entry Opportunity/ Availability	With respect to minerals management, lands available to occupy under the mining laws. Opportunity/availability components are defined as increments of the unsuitable land base which may qualify for future addition to the suitable land base and thereby contribute to an increase in the ASQ, if current conditions relating to the timber resource change. Any such inclusions would be accomplished through a Forest Plan amendment or revision.
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, Market	A good, service, or onsite use that can be purchased at a price. (FSM 1905)
Output, Nonmarket	A good, service, or onsite use not normally exchanged in a market. (FSM 1905)
Overmature	The stage at which a tree declines in vigor and soundness, for example, past the period of rapid height growth.
Overstory	That portion of the trees, in a forest or in a stand or more than one story, forming the upper or uppermost canopy.
Overview (Cultural)	A report, based primarily on archival research, that organizes and summarizes cultural resource information from a particular national forest or geographic area.
Overwood Removal	A harvest method that removes the overstory of a multiple-storied stand and leaves the smaller understory for further treatment (thinning or harvesting).

## P

Palatability (of	The relish with which a particular species or plant part is consumed by an animal.
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Herbage and Browse)	Nonpalatable plants are rarely consumed.
Partial Cut	Covers a variety of silvicultural practices where a portion of the stand is removed and a portion is left.
Partial Retention	See Visual Quality Level (VQL).
Particulate Matter (PM)	Any liquid or solid particles suspended in or falling through the atmosphere.
Particulates	Small particles suspended in the air and generally considered pollutants
Perennial Stream	A stream that flows year-round.
Permanent Improvement	In wilderness context: A structural or nonstructural improvement that is to remain at a particular location for more than one field season. Permanent improvements include such items as trails, toilet buildings, cabins, fences, tent frames, fire grills, and instrumentation stations.
Personal Use	Normally used to describe the type of permit issued for removal of wood products (firewood, post, poles, and Christmas trees) from national forest land when the product is for home use and not to be resold for profit.
Persons-At-One-Time (PAOT)	The number of people in an area or using a facility at the same time. Generally used as 'maximum PAOT to indicate the capacity of an area or facility to support peak usage within established user density standards and without degradation to biophysical resources.
Persons-At-One-Time/Days	The number of people times the number of days (PAOT/Days).
Physiographic Province	A region having a particular pattern of relief features or landforms that differs significantly from that of adjacent regions.
Plan of Operations	A document required from any person proposing to conduct mineral-related activities which utilize earth moving equipment and which will cause disturbance to surface resources or involve the cutting of trees (36 CFR 228.4)
Planning Area	The area of the National Forest System covered by a regional guide or forest plan.
Planning Criteria	Criteria prepared to guide the planning process. Criteria applied to collection and use of inventory data and information, analysis of the management situation, and the design, formulation, and evaluation of alternatives.
Planning Horizon	The overall time period considered in the planning process. It spans all activities covered in the analysis or plan and all future conditions and effects of proposed actions which would influence the planning decisions In this FEIS and Forest Plan, the planning horizon is considered to be 15 decades.
Planning Period	One decade. The time interval within the planning horizon that is used to show incremental changes in yields, costs, effects, and benefits.
Planning Records	The body of information documenting the decisions and activities which result from the process of developing a forest plan, revision, or significant amendment.
Plant Community	A vegetative complex unique in its combination of plants, which occurs in particular locations under particular influences, is a reflection or integration of the environmental influences on the site (such as soils, temperature, elevation, solar radiation, slope, aspect, and rainfall), and denotes a general kind of climax vegetation, such as ponderosa pine or bunchgrass, from which several plant community types may be derived on the basis of characteristic lesser vegetation.
Plant Community Type	A site classification that can be recognized on the ground by its plant species grouping and closely related soils or other characteristics. The type has distinct limitations or opportunities for productivity with limned variability from place to place.
Pole/Sapling	A Forest successional stage in which trees between five and nine inches in diameter are the dominant vegetation (also see Size Class).
Pole Timber	Trees of at least five inches in diameter at breast height, but smaller than the minimum utilization standard for sawtimber (also see Size Class).
Potential Yield	The sustainable output level of wood fiber available after deductions for other resource



	needs.
Precommercial Thinning	The practice of removing some of the trees of less than merchantable size from a stand so that the remaining trees will grow faster.
Prehistoric	Relating to the period of time before written records (prior to European contact). In Region 6 before 1800 A.D. or before the advent of written records.
Preparatory Cut	The removal of trees near the end of a rotation, which permanently opens the canopy and enables the crowns of seed bearers to enlarge, to improve conditions for seed production and natural regeneration. Typically done in the shelterwood system.
Prescribed Burning	The skilful application of fire to natural fuels under conditions of weather, fuel moisture, etc. that allows confinement of the fire to a predetermined area and produces the intensity of heat and rate of spread to accomplish planned benefits to one or more objectives of silviculture, wildlife management, grazing, or hazard reduction.
Prescribed Fire	A wildfire burning under specified conditions that will accomplish certain planned objectives. The fire may result from either planned or unplanned ignitions. Use of unplanned ignitions must have prior approval by the Regional Forester.
Prescription	See Management Strategy.
Present Net Value (PNV)	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	See Visual Quality Level (VQL).
Price	The unit value of an output expressed in dollars.
Price Outputs	Priced outputs are those that are or can be exchanged in the market place. The dollar values for these outputs fall into two categories: market or nonmarket (assigned values).
Price-Quantity Relationship	A schedule of prices that would prevail in a market for various quantities of the output exchanged.
Price Trend Analysis	An analysis done to estimate how a particular FORPLAN solution would change if predicted price trends were increased or decreased.
Primary Cavity Nesters	Wildlife species that excavate cavities in snags.
Primitive	See Recreation Opportunity Spectrum (ROS).
Primitive Recreation	Those types of recreational activities associated with unroaded land-e.g., hiking, backpacking, cross-country travel.
Private Nonindustrial Forest Land	Those forest lands owned by companies or individuals who do not own or operate facilities used for manufacture of wood products.
Production Potential	The capability of the land or water to produce a given resource.
Program	Sets of activities or projects with specific objectives, defined in terms of specific results and responsibilities for accomplishments.
Program Budget	A plan that allocates annual funds, work force ceilings, and targets among agencies.
Programmed Harvest Level	Timber scheduled for harvest for a specific year.
Project	An organized effort to achieve an objective identified by location, timing, activities, outputs, effects, and time period and responsibilities for executions.
Project Planning	The second level of planning for site-specific projects relating to the location, timing, activities, and control in accordance with NEPA regulations.
Proper Use (of Forage)	The amount of grazing utilization and/or trampling that an individual plant or species of plants can withstand and still maintain or improve its normal physiological and reproductive processes.
Property (Cultural)	A general term equivalent to 'cultural resource' in some laws and regulations.
Public Issue	A subject or question of widespread public interest relating to management of the National Forest System.
Public Participation	Meetings, conferences, seminars, workshops, tours, written comments, responses to survey

Activities	questionnaires, and similar activities designed and held to obtain involvement or comments from the public about Forest Service planning.
Purchaser Credit	Credit earned by the purchaser of a national forest timber sale by construction of contract-specified roads. Earned purchaser credit may be used by the purchaser as payment for national forest timber removed.

## Q

Quality Extensive Management (QE)	Range management based on low operating and investment costs per acre.
Quality Intensive Management (QI)	Range management to obtain a high production of livestock through the best techniques of range management.

## R

Range Allotment	An area designated for use of a prescribed number and kind of livestock under one management plan.
Range Analysis	Systematic acquisition and evaluation of range resource data for planning allotment management and the overall land and resource management.
Range Condition	<p>An ecological concept used to interpret livestock grazing impacts on vegetation (describe various successional stages of vegetation caused by levels of grazing). The condition rating related some level of past livestock grazing to some potential for improved production and species composition; in this way, It was interpreted as a basis for improving management. Originally developed in the Great Plains, the concept works well in climax grassland communities, not as well in shrub communities, and poorly on forested ranges. More recent interpretations move toward the concept of 'ecological condition which is defined as the degree of departure of the present vegetation from the potential natural community (the cause of the departure is not considered, and is certainly not directly tied to levels of livestock grazing). The classes of range condition are:</p> <p><i>Excellent</i> - Climax vegetation or potential natural community (implies that the current situation is 81-100 percent of that found in an undisturbed or unused condition).</p> <p><i>Good (G)</i> - 61-80 percent of the maximum production or species density and composition possible under existing environment.</p> <p><i>Fair (F)</i> - 41-60 percent of the maximum production or species density and composition.</p> <p><i>Poor (P)</i> - 21-40 percent of the maximum production or species density and composition.</p> <p><i>Very Poor (VP or V)</i> - 1-20 percent of the maximum production or species density and composition. Improvement in species density and composition probably cannot be achieved by natural means.</p> <p><i>Satisfactory Range Condition</i> - On suitable range, forage condition is at least Fair, with stable trend, and the allotment is not classified PC or PD (refer to the definition for Allotment Classification)</p> <p><i>Unsatisfactory Range Condition</i> - The allotment does not meet the criteria for satisfactory condition.</p>
Range Improvement	Any activity or program on or relating to rangelands which is designed to improve production of forage, change vegetative composition, control patterns of use, provide water, stabilize soil and water conditions, and/or provide habitat for livestock and wildlife. The term includes (but is not limited to) structures, treatment projects, and use of mechanical means to accomplish the desired results.
Rangelands	Rangelands are defined as areas with less than 10 percent tree cover where the majority of

Range Management (Strategy) Level	<p>the vegetation is grasses, forbs, and/or shrubs.</p> <p>The grazing management intensity assigned to a grazing area, which can range from no livestock, to some livestock, or to extensive or intensive grazing. This is usually associated with livestock density, degree of investment for range improvement, and intensity of management. The five strategies are</p> <ol style="list-style-type: none"> <li>1. <i>No Livestock Grazing</i>;</li> <li>2. <i>Minimum Grazing</i> - Minimum improvements to maintain the range resource, and use of simple management systems;</li> <li>3. <i>Extensive Grazing</i> - Rotation grazing systems are used, most or all improvements are nonstructural;</li> <li>4. <i>Intensive Grazing</i> - Rotation grazing systems are used, complemented by a wide variety of structural and nonstructural improvements; and</li> <li>5. <i>Exploitative</i> - (Is not used on National Forest System lands)</li> </ol>
Raptors	Any predatory bird-such as a falcon, hawk, eagle, or owl-that has feet with sharp talons or claws adapted for seizing prey and a hooked beak for tearing flesh.
Rate of Return	The financial yield per unit cost determined as the rate of interest at which total discounted benefits equal total discounted costs. (Internal rate of return is a similar measure appropriate to the benefits and costs that affect private firms or individuals.)
Real Dollar Value	A monetary value which compensates for the effects of inflation.
Recreation Capacity	The number of people that can take advantage of the supply of a recreation opportunity during an established use period without substantially diminishing the quality of the recreation experience or the biophysical resources.
Recreation Information Management (RIM)	A computer-oriented system for the organization and management of information concerning recreation use, occupancy, and management of national forest lands.
Recreation Opportunity	The availability of choices for user to participate in the recreational activities they prefer within the settings they prefer.
Recreation Opportunity Spectrum (ROS)	<p>Land delineations that identify a variety of recreation experience opportunities categorized into six classes on a continuum from Primitive to Urban. Each class is defined in terms of the degree to which It satisfies certain recreation experience needs, based on the extent to which the natural environment has been modified, the type of facilities provided, the degree of outdoor skills needed to enjoy the area, and the relative density of recreation use. The six of the seven classes dealt with on the Forest are:</p> <ol style="list-style-type: none"> <li>1. <i>Primitive</i> - Area is characterized by an 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.</li> <li>2. <i>Semi-primitive Nonmotorized</i> - Area is characterized by a predominantly natural or natural-appearing environment of moderate to large size Interaction between 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 subtle. Motorized recreation use is not permitted, but local roads used for other resource management activities may be present on a limited basis Use of such roads is restricted to minimize impacts on recreational experience opportunities</li> <li>3. <i>Semi-primitive Motorized</i> - Area is Characterized by a predominantly natural or natural-appearing environment of moderate to large size. Concentration of users is low, but there is often evidence of other users. The area is managed in such a way that minimum onsite controls and restrictions may be present, but would be subtle. Motorized recreation use of local primitive or collector roads with predominantly natural surfaces and trails suitable for motor bikes is permitted.</li> <li>4. <i>Roaded Natural</i> - Area is characterized by predominantly natural-appearing environments with moderate evidence of the sights and sounds of humans. Such evidence usually</li> </ol>

harmonizes with the natural environment. Interaction between users may be moderate to high, with evidence of other users prevalent. Resource modification and utilization practices are evident, but harmonize with the natural environment. Conventional motorized use is allowed and incorporated into construction standards and design of facilities.

5. *Roaded Modified* - Area is characterized by a considerably modified natural-appearing environment with considerable evidence of the sights and sounds of humans. Such evidence seldom harmonizes with the natural environment. Interaction between users may be low to moderate, but evidence of other users is prevalent. Resource modification and utilization practices are evident and seldom harmonize with the natural environment. Conventional motorized use is provided for in construction standards and design of facilities. The area is managed to meet modified and maximum modified visual quality objectives.

6. *Rural* - Area is characterized by a substantially modified natural environment. Sights and sounds of people are evident. Renewable resource modification and utilization practices enhance specific recreation activities or provide soil and vegetative cover protection. (Only a very minor amount on the UNF.)

NOTE The other ROS classification, Urban, IS not applicable to the Umatilla National Forest.

Recreation Visitor Day (RVD)	Twelve visitor-hours, which may be aggregated continuously, intermittently, or simultaneously by one or more persons.
Reforestation	The natural or artificial restocking of an area with forest trees: most commonly used in reference to artificial restocking.
Regeneration	The actual seedlings and saplings existing in a stand: or the act of establishing young trees naturally or artificially.
Regeneration Cut	The removal of trees intended for the purpose of assisting regeneration already present, or to make a regeneration of the stand possible.
Regulations	Generally refers to the Code of Federal Regulations (CFR), Title 36, Chapter II, which pertains to management of the Forest Service.
Rehabilitation (Visual Mgmt.)	A short-term management alternative used to return existing visual impacts in the natural landscape to a desired visual quality.
Release	Freeing trees from competition for light, water, and nutrients by removing or reducing the vegetation growth that is overtopping or closely surrounding them.
Removal Cut (Final Cut)	The removal of the last seed bearers or shelter trees after regeneration is established under a shelterwood method.
Renewable Resources	Resources that can be used indefinitely, when the use rate does not exceed the ability to renew the supply.
Research Natural Area (RNA)	Designated area of land, usually over 300 acres in size, with ecological characteristics of scientific or educational interest
Residual Stand	The trees that remain standing after some event, typically a harvest cut.
Residue Loading	The quantity of the unwanted accumulation in the forest of living or dead, mostly woody material that is added to and rearranged by human activities, such as forest harvest, cultural operations, and land clearing. Forest residue includes slash materials, excessive litter on the forest floor, unwanted living brush and weed trees, and standing dead trees and snags.
Residue Utilization	Removal and use of forest residue (such as slash, litter, brush, dead trees, and snags) for energy production, home heating, or wood products.
Resource	Anything which is beneficial or useful-be It animal, vegetable, mineral, a location, a labor force, a view, an experience, etc. Resources, in the context of land use planning, thus vary from such commodities as timber and minerals to such amenities as scenery, scenic view points, or recreation opportunities.
Resource Allocation	The action of apportioning the supply of a resource to specific uses or to particular persons or organizations.
Resource Allocation	A mathematical model using linear programming which will allocate land to different

Model (RAM)	management prescriptions and schedule implementation of those prescriptions simultaneously. The purpose of the model is to find a schedule and allocation that meets the goals of the Forest and optimizes some objective function, such as "minimize costs".
Resource Use and Development Opportunities	A possible action, measure, or treatment and corresponding goods and services identified and introduced during the scoping process, which subsequently may be incorporated into and addressed by the Forest Land and Resource Management Plan in terms of a management prescription.
Rest Rotation	An intensive system of range management whereby grazing is deferred on various parts of the range during succeeding years, allowing the deferred part complete rest for one year.
Retention	See Visual Quality Level (VQL).
Returns to Counties	The portion of receipts derived from Forest Service resource management that is distributed to State and county governments such as the Forest Service 25 percent fund payments.
Revegetation	The re-establishment or improvement of vegetation through management practices.
Riparian	Pertaining to areas of land directly influenced by water. Riparian areas usually have visible vegetative or physical characteristics reflecting this water influence. Streambanks, lake borders, or marshes are typical riparian areas.
Riparian Area	A geographically delineated area with distinctive resource values and characteristics that is comprised of aquatic and riparian ecosystems. This includes floodplains, wetlands, and all areas within a horizontal distance of at least 100 feet from the normal line of high water of a stream channel or from the shoreline of a standing body of water.
Riparian Ecosystem	A transition between the aquatic ecosystem and the adjacent upland terrestrial ecosystem. Identified by soil characteristics and distinctive vegetation communities that require free or unbound water.
Risk (Fire)	Defined as the probability that an ignition will occur.
Roadless Area Review and Evaluation II (RARE II)	A comprehensive process directed by the Secretary of Agriculture to identify roadless and undeveloped land areas in the National Forest System, to determine their uses (for either wilderness or other resource management and development), and to determine areas that would require further planning to make such a decision.
Roads	<i>Arterial</i> - Roads comprising the basic access network for National Forest System administrative and management activities. These roads provide service to large land areas and usually connect with public highways or other primary travel routes. Locations and standards are determined often by a demand for maximum mobility and travel efficiency rather than to serve a specific resource. Usually, those roads are developed and operated for long-term land and resource management purposes and constant service. <i>Collector</i> - These roads serve smaller land areas than do arterials, and are usually connected to a national forest arterial or public highway. They collect traffic from national forest local roads or terminal facilities. Locations and standards are influenced by both long-term multi-resource service needs and some travel efficiency. Collector roads may be operated for either constant or intermittent service, depending on land use and resource management objectives for the area served by the facility. <i>Local</i> - Roads constructed and maintained for the activities of a given resource element. However, some use may be made by other resource activities. These roads - connect terminal facilities with national forest collector or arterial roads or public highways. Locations and standards usually are determined by the requirements of a specific resource activity rather than by travel efficiency. National forest local roads may be developed and operated for either long- or short-term service.
Rotation	Planned number of years between the formation of a generation of trees and its final harvest at a specified stage of maturity. Appropriate for even-aged management only.
Rotation Age	The age of a stand when harvested at the end of a rotation.
Roundwood Products	Logs, bolts, or other round sections cut from trees.
Runoff in Inches	The depth in inches to which a drainage area would be covered if all the runoff for a given

time period were uniformly distributed.

## S

Safe Use (of Forage Areas)	The level of grazing and/or trampling that the total forage on a site can withstand, and still maintain or improve the range condition of the site. This includes leaving sufficient litter to protect the soil.
Sale Schedule	The quantity of timber planned for sale by time period, from the 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. For planning purposes, the sale schedule and the allowable sale quantity are synonymous for all periods or decades over the planning horizon.
Salvage	The removal of recently-dead trees.
Salvage Cuttings	Intermediate cuttings made to remove trees that are dead or in imminent danger of being killed by injurious agents.
Sanitation Cuttings	Intermediate cuttings made to remove dead, damaged, or susceptible trees to prevent the spread of pests or pathogens.
Sanitation Salvage	The removal of dead, damaged, or susceptible trees to prevent the spread of pests or pathogens and promote forest hygiene.
Satisfactory Cover	Cover used by animals to ameliorate the effects of weather. For elk, satisfactory thermal cover includes stands of coniferous trees 40 feet or more in height with an average crown closure of 70 percent or more; and for deer, cover may include saplings, shrubs, or trees at least 5 feet tall with 75 percent crown closure. Marginal thermal cover includes coniferous stands of trees 10 feet or more in height with a 40-69 percent crown closure.
Satisfactory Range Condition	<p>On suitable range, forage condition is at I e a fair, with stable trend, and allotment is not classified PC (basic resource damage) or PD (other resource damage).</p> <p>PC (Basic Resource Damage) - Allotments will be classified as PC when analysis or evaluation indicates that one or more of the following conditions exist and livestock use on the allotment is or has been a major factor contributing to this condition.</p> <ol style="list-style-type: none"><li>1. Maximum summer water temperatures are elevated above state standards or other approved criteria on SMU class I or II streams and this is largely due to the loss of shade-producing vegetation in the allotment.</li><li>2. Management-induced instability exceeds 20 percent of the total miles of stream (SMU classes I-IV) in an allotment.</li><li>3. Gully development of sufficient size to lower the seasonally saturated zone and change the plant community type is occurring.</li><li>4. Soil condition rating on 25 percent or more of key areas is rated poor or very poor.</li></ol> <p>PD (Other Resource Damage) - These allotments may or may not have approved allotment management plans (AMP's), but adverse impacts on resources other than the basic soil and water resources are occurring. These impacts are the result of resource management objectives not being met. An allotment will be classified as PD when 10 percent or more of its area meets this criteria. Damage to vegetation is based on use in excess of that planned.</p>
Sawtimber	Trees containing at least one 12-foot sawlog or two noncontiguous 8-foot logs, and meeting regional specifications for freedom from defect. Softwood trees must be at least 9 inches in diameter and hardwood trees 11 inches in diameter at breast height.
Scarified	Land in which the topsoil has been broken up or loosened in preparation for regenerating by direct seeding or natural seed fall. Also refers to ripping or loosening road surfaces to a specified depth for obliteration or 'putting a road to bed.'
Scenic Areas	Places of outstanding or matchless beauty which require special management to preserve

	these qualities. They may be established under 36 CFR 294.1 whenever lands possessing outstanding or unique natural beauty warrant this classification.
Scheduled Timber Harvests	Volumes and acres programmed for harvest which are within the allowable sale quantity. This does not include salvage and sanitation harvesting.
Second Growth	Forest growth that has come up naturally after some drastic interference (for example, wholesale cutting, serious fire, or insect attack) with the previous forest growth.
Secondary Cavity Nester	Wildlife that occupies a cavity in a snag that was excavated by another species.
Sediment	Earth material transported, suspended, or deposited by water.
Seed Tree Cutting	Removal in one cut of the mature timber from an area, except for a small number of seed bearers left singly or in small groups.
Seedlings and Saplings	Live trees less than 5 inches in diameter at breast height (also see Size Class).
Selection Cutting	The annual or periodic removal of trees (particularly mature trees), individually or in small groups, from an uneven-aged forest, to realize the yield and establish a new crop of irregular constitution.
Self-sustaining Population	A wildlife population of sufficiently large size to assure its continued existence within the area of concern without introduction of other individuals from outside the area.
Semi-Primitive Motorized ROS Class	See Recreation Opportunity Spectrum (ROS)
Semi-Primitive Nonmotorized ROS Class	See Recreation Opportunity Spectrum (ROS)
Sensitive Species	Those species that have appeared in the Federal Register as proposed for classification and official listing as endangered or threatened species, that are on an official state list, or that are recognized by the Regional Forester as needing special management to prevent their being placed on Federal or State lists.
Sensitivity Analysis	A determination of the effects of varying the level of one or more factors, while holding the other factors constant.
Sensitivity Level	A particular degree or measure of viewer interest in scenic qualities of the landscape.
Separate Suitability Components (SSC Lands)	Those forested lands tentatively suitable for timber production that grow less than 20 cubic feet per acre per year of timber but have greater than 10 percent occupancy (trees cover more than 10 percent of the acre).
Sequential Upper and Lower Bounds	A FORPLAN term referring to the constraint that sets upper and lower limits by which harvest levels can increase or decrease from decade to decade. This constraint constitutes a departure from nondeclining flow and allows the harvest to rise or fall by decade according to the bounds that are set (also see Constraint).
Seral	A biotic community that is in an early developmental, transitory stage in an ecological succession.
Severely Burned	Soils are considered to be severely burned when the top layer of mineral soil has been significantly changed in color, usually to red, and the next one-half inch blackened from organic matter charring by heat conducted through the top layer.
Shade-Intolerant Plants	Plants that do not germinate or grow well in shade.
Shade-Tolerant Plants	Plants that grow well in shade.
Shelterwood	The cutting method that describes the silvicultural system in which, in order to provide a source of seed and/or protection for regeneration, the old crop (the shelterwood) is removed in two or more successive shelterwood cuttings. The first cutting is ordinarily the seed cutting, though it may be preceded by a preparatory cutting, and the last is the final cutting. Any intervening cutting is termed removal cutting. An even-aged stand results.
Shelterwood Cutting	Cutting which leaves enough trees to provide shade and a seed source for the

	establishment of tree regeneration.
Silviculture	The art and science of controlling the establishment, composition, and growth of forests to meet the desired future conditions and management objectives
Silvicultural System	A management process where by 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.
Site Enhancement	Adding to or bringing out the inherent values for the benefit and enjoyment of the public. Enhancement can take many forms, from the National Register nomination of an important site, to the development of a site for public interpretation, or the excavation, analysis, and interpretation of an archaeological site.
Site Preparation	(1) An activity (such as prescribed burning, disking, and tilling) performed on a reforestation area, before introduction of reforestation, to ensure adequate survival and growth of the future crop: or (2) manipulation of the vegetation or soil of an area prior to planting or seeding. The manipulation follows harvest, wildfire, or construction in order to encourage the growth of favored species. Site preparation may include the application of herbicides; burning or cutting of living vegetation that competes with the favored species: tilling the soil: or burning of organic debris (usually logging slash) that makes planting or seeding difficult.
Site Productivity	Production capability of specific areas of land.
Size Class	For the purposes of forest planning, size class refers to the intervals of tree stem diameter used for classification of timber in the Forest Plan data base. seedling/sapling = less than 5-inch diameter pole/sapling or pole timber = 5-inch to 9-inch diameter sawtimber = greater than 9-inch diameter
Skyline Logging	A system of cable logging in which all or part of the weight of the logs is supported during yarding by a suspended cable.
Slash	The residue left on the ground after timber cutting and/or accumulating as a result of storm, fire, or other damage. It includes unused logs, uprooted stumps, small broken trees, branches, twigs, needles and leaves, bark, and chips.
Smolt	A juvenile salmon or steelhead during its migration to the ocean.
Snag	A standing dead tree from which the needles or leaves and most of the limbs have fallen.
Snag Dependent Wildlife	Wildlife species that are dependent on snags for nesting, roosting habitat, or food.
Socioeconomic	Pertaining to or signifying the combination or interaction of social and economic factors.
Softwoods	Coniferous trees, usually evergreen, having needles or scalelike leaves.
Soil Mass Wasting	Soil mass wasting is the detachment and movement of soil or surface mantle material. Some landslides fall in a single mass or single event and move downslope to cause debris slides and avalanches. Other landslides detach and move slowly, over a period of years, downslope. Both these types represent end members of landslide generated impacts. Mass wasting events are classified based on their morphology, water content, type of material involved, and rate of movement.
Soil Productivity	The capacity of a soil to produce a specific crop, such as fiber or forage, under defined levels of management. Productivity is generally dependent on available soil moisture and nutrients, and length of growing season.
Soil Surveys	Systematic examinations of soils in the field and in laboratories: their description and classification: the mapping of kinds of soil; the interpretation according to their adaptability for various crops, grasses, and trees: their behavior under use or treatment for plant production or for other purposes; and their productivity under different management systems.
Special Interest Areas	Areas managed to make recreation opportunities available for the understanding of the earth and its geological, historical, archeological, botanical, and memorial features.



Special Management Areas (SMA)	Areas of unusual public interest or other significance; e.g., wilderness, primitive areas, scenic areas, or archeological areas SMA's do not require formal designation, however, Special Interest Areas do.
Special Use Permit	A permit issued under established laws and regulations to an individual, organization, or company for occupancy or use of national forest land for some special purpose.
Stand (Tree Stand)	An aggregation of trees occupying a specific area and sufficiently uniform in composition, age arrangement, and condition, as to be distinguishable from adjoining forest areas.
Stand Diversity	Any attribute that makes one timber stand biologically or physically different from other stands. This difference can be measured by, but not limited to, different age classes, species, densities, or non-tree floristic composition.
Standards and Guidelines	Principles specifying conditions or levels of environmental quality to be achieved.
Stocking	The degree of occupancy of land by trees as measured by basal area or number of trees and as compared to a stocking standard; that is, the basal area or number of trees required to fully use the growth potential of the land.
Strategy	See Management Strategy and Range Management (Strategy) Level.
Stream Class	Four stream classes are defined by the extent of the perennial or fish bearing portion of the stream. While streams or parts of streams can be classified, one stream may be sectionalized into several classes. <ol style="list-style-type: none"> <li>1. <i>Class I</i> - Streams or segments thereof which are used by anadromous and resident fish (usually perennial).</li> <li>2. <i>Class II</i> - Streams or segments thereof which are used only by resident fish (usually perennial).</li> <li>3. <i>Class III</i> - All other perennial streams or segments thereof not previously classified.</li> <li>4. <i>Class IV</i> - All other intermittent streams or segments thereof not classified above.</li> </ol>
Streamside Management Unit (SMU)	An area of varying width adjacent to a stream where practices that might affect water quality, fish, and other aquatic resources are modified to meet water quality goals, for each class of stream. The width of this area will vary with the management goals for each class of stream, characteristics of the stream and surrounding terrain, and the type and extent of the planned activity.
Stream Structure	The arrangement of logs, boulders, and meanders which modify the flow of water, thereby causing the formation of pools and gravel bars in streams. Generally, there is a direct relationship between complexity of structure and fish habitat. Complex structure is also an indication of watershed stability.
Substantive Comment	A comment that provides factual information, professional opinion, or informed judgment germane to the action being proposed.
Subwatershed	A division or part of a defined watershed.
Succession	The progressive development of vegetation toward its highest ecological expression, the climax community, replacement of one plant community by another.
Successional Stage	A stage or recognizable condition of a plant community which occurs during its development from bare ground to climax. For example, coniferous forests in the Blue Mountains progress through six recognized stages: grass-forb, shrub-seedling, pole-sapling, young, mature, and overmature as described below: <ol style="list-style-type: none"> <li>1. <i>Grass-forb</i> - A successional stage dominated by grasses and forbs.</li> <li>2. <i>Shrubseedling</i> - The vegetation of the stand is dominated by shrubs or tree seedlings or both.</li> <li>3. <i>Pole-sapling</i> - The dominant vegetation is trees that qualify as poles or saplings or both.</li> <li>4. <i>Young</i> - A stand of trees dominated by trees that are no longer poles but have not yet reached maturity.</li> <li>5. <i>Mature</i> - The stand is primarily composed or dominated by mature trees in vigorous condition.</li> </ol>

6. *Overmature* - A stand that is past full maturity and showing decay and deterioration: the last stage in forest succession. The USDA Forest Service's working definition for old growth stands in the Blue Mountains is 37 live trees or more per hectare (15 per acre) over 53-centimeter (21-in) d.b.h., 2 or more snags per hectare (0.5 snag per acre) over 53-centimeter (21-in) d.b.h., two or more canopy levels, heart rot and other signs of stand decadence present and obvious, overstory canopy closure of 1040 percent, usually with a definite shrub-sapling layer with a canopy closure of over 40 percent, with understory and overstory canopy combined exceeding 70 percent, and logs obvious on the ground. Timber type mapping classes and their tie to wildlife habitat successional stages have the following relationship:

<u>Timber Size Class</u>	<u>Successional Stage</u>
No size class (use data from timber Harvest or reforestation records)	I Grass-Forb
Seedling – 6" tall – 0.9" dbh	II Shrub-Seedling
Sapling – 1.0" – 4.9" dbh	III Pole-Sapling
Pole – 5.0" – 8.9" dbh	
Medium sawlog (MS) 9.0" – 20.9" dbh	IV Young
Large sawlog (LS) 21.0"+ dbh	V Mature
	VI Overmature

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.
Suitable Range (for Livestock Use)	Land which produces or has the inherent capability to produce 50 pounds or more of palatable forage per acre, can be grazed on a sustained-yield basis, and is or can feasibly be made accessible for livestock use.
Summer Range	A range, usually at higher elevation, used by deer and elk during the summer. A summer range is usually much more extensive than a winter range.
Supply	The amount of an output that producers are willing to provide at the specified price, time period, and condition of sale.
Supply Schedule (Curve)	A schedule of amounts of an output that producers are willing to provide at a range of prices, at a given point in time and condition of sale (also see Price-Quantity Relationship).
Suppression	All the work and activities connected with fire-extinguishing operations, beginning with discovery and continuing until the fire is completely extinguished.
Surface Erosion	The detachment and transport of individual soil particles by wind, water, or gravity. Surface erosion can occur as the loss of soil in a fairly uniform layer across the land surface or in many small rills.
Sustained Yield	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 to the productivity of the land.

## T

Temporary Structure	In wilderness context: Any structure that is easy to dismantle, that could be removed completely from a site between periods of actual use, and that must be removed at the end of each season of use if the nonuse period is greater than 30 days.
Tentatively Suitable Forest Land	Forest land that is producing or is capable of producing crops of industrial wood and: (1) has not been withdrawn by Congress, the Secretary, or the Chief; (2) existing technology and knowledge are available to ensure timber production without irreversible damage to soils productivity or watershed conditions: (3) existing technology and knowledge, as reflected in

	current research and experience, provides reasonable assurance that it is possible to restock adequately within 5 years after final harvest: and (4) adequate information is available to project responses to timber management activities.
Thinning	A felling made in an immature stand primarily to maintain or accelerate diameter increment and also to improve the average form of the remaining trees without permanently breaking the canopy. An intermediate cutting.
Threatened Species	A plant or wildlife species officially designated by the US. Fish and Wildlife Service as having its existence threatened in a localized area, such as state or province or lesser area, because its habitat is threatened with destruction, drastic modification, or severe curtailment or because of over-exploitation, disease, predation, or other factors.
Tiering	Refers to the coverage of general matters in broader environmental impact statements (such as National program or policy statements) with subsequent narrower statements or environmental assessments (such as regional or basin-wide 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. (40 CFR 1508.28)
Timber Classification	Forested land classified according to how it relates to the management of the timber resource as follows: 1. <i>Nonforest</i> - Land that has never supported forests, and land formerly forested where use for timber production is precluded by development or other uses. 2. <i>Forest</i> - Land at least 10 percent stocked (based on crown cover) by forest trees of any size, or formerly having had such tree cover and not currently developed for nonforest use. 3. <i>Suitable</i> - Commercial forest land identified in the Forest planning process as appropriate for timber production. 4. <i>Unsuitable</i> - Forest land withdrawn from timber utilization by statute or administrative regulation (for example, wilderness), or identified in the Forest planning process as not appropriate for timber production. 5. <i>Commercial Forest</i> - Forest land that is tentatively suitable for the production of continuous crops of timber and that has not been withdrawn.
Timber Harvest Schedule	The quantity of timber planned for sale and harvest, by time period, for the Forest. The first period of the selected harvest schedule, usually a decade, provides the allowable sale quantity. Future periods are shown to establish that sustained yield will be achieved and maintained.
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 other than for fuelwood.
Timber Sale Program Quantity (TSPQ)	The volume of timber planned for saw during the first decade of the planning horizon. It includes the allowable sale quantity (chargeable volume) and any additional material (nonchargeable volume) planned for sale. Expressed as the average for the first decade.
Timber Stand Improvement	Measures, such as thinning, pruning, release cutting, prescribed fire, girdling, weeding, or poisoning of unwanted trees, aimed at improving growing conditions for the remaining trees.
Total Net Merchantable Sawtimber	Includes the 'Allowable Sale Quantity' and 'Other Sawtimber.' 'Other Sawtimber meets the utilization standards in the Regional Guide, but is not considered 'Chargeable Timber Volume' against the planned 'Allowable Sale Quantity Goals.'
Tradeoff	The combination of benefits and costs which are gained and lost in switching between alternative courses of action. Tradeoffs include only those portions of benefits and costs which are not common to all alternative courses of action under consideration.
Transitory Range	Land that is suitable for grazing use of a nonenduring nature over a period of time: often found in the openings created by timber harvesting activities. For example, on particularly disturbed lands, grass may cover the area for a period of time before being replaced by trees or shrubs not suitable for forage.

Turbidity The degree of opaqueness, or cloudiness, produced in water by suspended particulate matter, either organic or inorganic. Measured by light filtration or transmission and expressed in Jackson Turbidity Units (JTU's).

## U

Understory The trees and other woody species growing under a more-or-less continuous cover of branches and foliage formed collectively by the upper portion of adjacent trees and other woody growth.

Uneven-Aged Management The application of a combination of actions needed to simultaneously maintain continuous high forest cover, recurring regeneration of desirable species, and 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.

Uneven-Aged Silviculture Systems The combination of actions that result in the creation of forests or stands of trees, in which trees of several or many ages grow together. Cutting methods that develop and maintain uneven-aged stands are individual tree and group selecting cutting methods:

1. Individual Tree Selection Cutting - The removal of selected trees of all size classes on an individual basis.
2. Group Selection Cutting - The removal of all trees in groups for regeneration purposes.

The size the group will be small enough in area that all subsequent regeneration will be influenced by the surrounding uncut stand. Cuts are generally 0.25 - 2.0 acres in size.

Unplanned Ignition Unregulated Timber Management A fire started at random by either natural or human causes, or a deliberate incendiary fire. Timber cut from lands that are not organized to provide sustained yields of timber.

Utility and/or Transmission Corridor A strip of land designated for the transportation of energy, commodities, and communications by railroad, state highway, electrical power transmission (69 kv and above), oil and gas and coal slurry pipelines 10 inches in diameter and larger, and telecommunication cable and electronic sites for interstate use. Transportation of minor amounts of power for short distances, such as short feeder lines from small power projects including geothermal or wind, or to serve customer subservice substations along the line, are not to be treated within the Forest Plan effort (also see Corridor, Avoidance Areas, and Exclusion Areas).

Utilization Standards Standards guiding the use and removal of timber, which is measured in terms of diameter at breast height (d.b.h), top diameter inside the bark (top d.i.b.), and percent 'soundness' of the wood.

## V

Variety Class A particular level of visual variety or diversity of landscape character.

Vegetative Management Activities designed primarily to promote the health of the crop forest cover for multiple-use purposes.

Vegetative Trend The direction of change in vegetative or plant composition which leads from one successional stage to another.

Vertical Diversity The diversity in an area that results from the complexity of the above ground structure of the vegetation; the more tiers of vegetation or the more diverse the species makeup or both, the higher the degree of vertical diversity.

Viable Population The number of individuals of a species required to ensure the long-term existence of the

species in natural, self-sustaining populations adequately distributed throughout a region.  
 Viewshed Portion of the forest that is seen from a major travel route or high use location.  
 Visitor Temporary inhabitant of an area. Recreation visitor: One who is in an area temporarily for refreshment of body and/or mind, and usually has a significant conscious or subconscious interest in the scenic qualities of an area.

Visual Pertaining to a mental image attained by sight.  
 Visual Condition The visual appearance of a landscape described in terms of the degree of alteration of the natural-appearing landscape (see FSM 2383, 3/84 R-6 Supp 70). The following ratings for existing visual conditions (EVC) have been established

1. *Natural Appearance* - A viewshed in which no more than 5 percent of the area actually seen appears to be visually altered. The altered area may include as much as 1 percent modification, but no maximum modification or unacceptable modification.
2. *Slightly Altered Appearance* - A viewshed in which no more than 10 percent of the area actually seen appears to be visually altered. The altered area may include as much as 5 percent modification, but no more than 3 percent at maximum modification.
3. *Moderately Altered Appearance* - A viewshed in which no more than 20 percent of the area actually seen appears to be visually altered. The altered area may include as much as 10 percent modification or lower, but no more than 5 percent maximum modification or unacceptable modification.
4. *Heavily Altered Appearance* – A viewshed in which more than 20 percent of the area actually seen appears to be visually altered. All the altered areas may be maximum modification or more heavily impacted.

Viewshed condition ratings also serve to describe the appearance which is predicted to exist as a result of implementing VQL's. Equivalent terms are:

<u>Visual Condition</u>	<u>Visual Quality Level (or Objective)</u>
Natural Appearing	Preservation or Retention
Slightly Altered	Partial Retention
Moderately Altered	Partial Retention or Modification
Heavily Altered	Modification or Maximum Modification

Visual Quality Level (VQL) and Visual Quality Objective (VQO) A desired level of excellence based on physical and sociological characteristics of an area. Refers to degree of acceptable alteration of the characteristic landscape measured in degrees of deviation from the natural-appearing landscape. Visual Quality Levels (VQL's) become Visual Quality Objectives (VQOs) upon approval of the Forest Land and Resource Management Plan. Levels or objectives are:

1. Preservation - Ecological change only.
2. Retention - Human activities are not evident to the casual forest visitor.
3. Partial Retention - Human activity may dominate the characteristic landscape, but must, at the same time, follow naturally established form, line, color, and texture. It should remain visually subordinate when viewed in foreground or middle ground.
4. Modification - Human activity may dominate the characteristic landscape, but must, at the same time, follow naturally established form, line, color, and texture. It should appear as a natural occurrence when viewed in foreground or middle ground.
5. Maximum Modification - Human activity may dominate the characteristic landscape, but should appear as a natural occurrence when viewed as background.

Visual Resource The composite of basic terrain, geologic 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.

## W

Water Rights	Rights to divert and use water or to use it in place.
Water Yield	The measured output of the Forest streams.
Watershed	One of the 52 delineated major drainage basins to which the Umatilla National Forest contributes runoff waters.
Watershed Impact Area	Areas within a watershed that are being affected by harvesting, road building, etc. Impact areas are limited to a percent of the total watershed area by the Forest-wide Standards and Guidelines in Appendix D of the FEIS.
Wetlands	Areas that are inundated by surface water or ground water with a frequency sufficient to support, and under normal circumstances does or would support, a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction (Executive Order 11990).
Wilderness	Area designated by congressional action under the 1964 Wilderness Act and other wilderness acts. Wilderness is defined as undeveloped Federal land retaining its primeval character and influence without permanent improvements or human habitation. Wildernesses are protected and managed to preserve their natural conditions, which generally appear to have been affected primarily by the forces of nature, with the imprint of human activity substantially unnoticeable; have outstanding opportunities for solitude or for a primitive and confined type of recreation: include at least 5,000 acres or are of sufficient size to make practical their preservation, enjoyment, and use in an unimpaired condition; and may contain features of scientific, educational, scenic, or historical value as well as ecologic and geologic interest.
Wild and Scenic	Those rivers or sections of rivers designated as such by congressional action under the Rivers 1968 Wild and Scenic Rivers Act, as supplemented and amended, or those sections of rivers designated as wild, scenic, or recreational by an act of the Legislature of the state or states through which they flow. Wild and Scenic Rivers may be classified and administered under one or more of the following categories: <ol style="list-style-type: none"><li>1. <i>Wild River</i> - Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watershed or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.</li><li>2. <i>Scenic River</i> - Those rivers or sections of rivers that are free of impoundments, with watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.</li><li>3. <i>Recreational River</i> - Those 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.</li></ol>
Wildfire	Any wild land fire that is not a prescribed fire. All wildfires require suppression.
Wildlife and Fish User Day	Twelve visitor-hours which may be aggregated continuously, intermittently, or simultaneously by one or more persons.
Wildlife Buffer	A strip or patch of vegetation that is left or managed to reduce the impact of a treatment or action of one area on another.
Window	Usually a short narrow passageway through constrained areas which are the most feasible potential locations for lineal facilities considering engineering and/or environmental factors.
Winter Range	A range, usually at lower elevation, used by migratory deer and elk during the winter months; usually better defined and smaller than summer range.

## X, Y, Z

Yarding	The moving of logs from the stumps where cut to a central concentration area or landing.
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Yield Tables	Tables that estimate the level of outputs that would result from implementing a particular active. Usually referred to in conjunction w2h FORPIAN input or output. Yield tables can be developed for timber volumes, range production, soil and water outputs, and other resources.
Zone of Influence	The geographic area whose social, economic, and/or environmental condition Is significantly affected by changes in forest resource production or management.