

## V. IMPLEMENTATION, MONITORING, AND EVALUATION

### A. IMPLEMENTATION

The Plan provides the long-range management direction for the Forest. Direction is the guidance Forest personnel will use to achieve the results outlined in the Plan. It also informs the public and other agencies about future Forest programs, which facilitates understanding and cooperation. Direction is expressed in goals, objectives, standards and guidelines, and management prescriptions that respond to public issues, management concerns, and opportunities. That response is shaped by the availability, suitability, and capability of the land and its resources, and professional judgment.

Implementation of the Plan is the translating of the goals, objectives, and standards and guidelines stated in the Plan into visible results. The tools of Plan implementation are Program Development and Budgeting and Annual Work Planning processes. These processes supplement the Plan by making the annual adjustments and changes needed to reflect current priorities within the overall direction of the Plan.

Full implementation of the Forest Plan, especially the ability to meet the programmed Forest Action Schedules, depends upon receiving an adequate budget for the Salmon National Forest. Reduced budgets may limit number and types of activities, but those that take place will do so within appropriate standards.

Each year, as the Plan is being implemented, projects or activities will be scheduled by Ranger District and management area. Each project or activity having environmental effects will be subject to environmental analysis following NEPA procedures and tiered to the Forest Plan. Participants in the process are the Forest Supervisor, District Ranger, Management Team, and ID Team, or combinations thereof. Others are involved in the environmental analysis (i.e., external to the Forest Service organization) as the issues or interests indicate.

Projects or activities that are scheduled in the Forest Plan and Program Plan and Budget for funding are subject to evaluation. To aid in the evaluation, projects and activities for each Ranger District should receive preliminary evaluation at least annually to determine funding, work schedules, and ID Team needs to complete environmental analysis. These may be grouped by element, project, and fiscal year. At least three years should be listed and updated annually in order to tie to program planning/budgeting schedules and where lead time is a factor in meeting time tables (i.e., obtaining rights-of-way).

Each project listed will have a preliminary office evaluation by an ID Team of the following factors:

1. Objectives of the project and preliminary estimate of alternatives to achieve objectives.
2. Preliminary issue/concern identification and public involvement requirements.
3. Skills needed to evaluate issues and develop field information and time factors involved.
4. Preliminary tier to Forest Plan/EIS to determine data needs not covered in the original NEPA documents.

From the foregoing information, the Forest will prepare an annual listing of projects to be evaluated to be made available to the public. The purpose of the listing is to alert interested publics of proposed activities and afford an opportunity for involvement.

NEPA procedures to be applied for projects covered in the Forest Plan/EIS:

1. Environmental Assessment. A NEPA document used for projects requiring additional analysis beyond that in the Forest Plan. Alternatives would evaluate different methods of accomplishing project objectives within standards, guidelines, and management prescriptions contained in the Forest Plan. The no action alternative would be to maintain the current situation and not implement the project. Projects of this nature should not require an EIS or amendment to the Forest Plan EIS unless significantly new information indicates otherwise.
2. Categorical Exclusions. Projects or activities that in the judgment of the responsible line officer are adequately covered in the Forest Plan, or are not environmentally significant and do not require additional environmental analysis.

#### B. MONITORING AND EVALUATION

Monitoring and evaluation following implementation of the Plan will provide the land manager with information on progress toward achieving the goals, objectives, and standards of the Plan.

Monitoring will determine:

1. If prescriptions for management areas are applied as prescribed.
2. If standards and management guidelines are being followed.
3. If objectives of the Plan are being achieved.
4. If application of prescriptions for management areas are responding to public issues, management concerns, and management opportunities.
5. If effects of Plan implementation are occurring as predicted.

6. If costs of Plan implementation are as predicted.
7. If management practices on non-Forest lands adjacent to and within the Forest's boundaries are affecting the goals and objectives of the Plan.
8. Effects of Plan implementation on other land and resource management agencies or organizations.

A detailed monitoring program will be prepared as part of the Forest's annual work program. This monitoring program will include details on the amount and location of monitoring to be accomplished, based on approved work programs and availability of funds. Specific locations, intensity of sampling, person days required, and costs will be indicated in the annual monitoring program.

Results of the site-specific monitoring program will be coordinated and documented in an annual review. Results of the monitoring program also will be analyzed by an interdisciplinary team of resource specialists and reviewed by the management team. The management team includes the Forest Supervisor, Branch Chiefs, and District Rangers.

Any needs for further action, which are identified by the monitoring program, will be recommended by the management team and approved by the Forest Supervisor. Recommendations may include:

1. No action needed, monitoring indicates goals, objectives, and standards are being achieved;
2. Refer recommended action to the appropriate line officer to better implement management area prescriptions;
3. Modify the management area prescriptions as a Plan amendment;
4. Modify the allocation of a management area prescription as a Plan amendment;
5. Revise the projected schedule of outputs; or
6. Initiate revision of the Plan.

The Forest Supervisor's decisions resulting from needs identified by the monitoring program will be documented and filed for future use in amending or revising the Plan. An evaluation report, as required by 36 CFR 219.12(k), will be prepared and submitted to the Regional Forester at the end of years four and nine after Plan implementation. During interim years, an evaluation report will be prepared and submitted only if there should be a need to effect a Plan revision.

The Plan's monitoring requirements are presented in Table V-1.

Table V-1 if formatted by functional area (i.e., Range, Timber, etc.) for ease of identifying the purpose of each activity. Monitoring; however, is designed to determine in an integrated manner, the extent of impacts to all resources from specific management activities (i.e., timber harvest, road building, grazing, mining). This integrated approach to monitoring assures that the data collected is useful in future efforts to predict environmental effects from various activities and for measuring the degree to which plan goals and objectives are met.

Table V-1 (the monitoring plan) contains the following components:

1. MIH Code - the numerical identifier of the item to be monitored.
2. Activity, practice or effort - a specific statement of what will be monitored.
3. Monitoring technique - a description of the technique and sources of information to be employed. To the extent possible, existing reporting systems and standard methods will be used.
4. Expected precision - the accuracy of exactness with which data is collected. Precision is qualitatively rated as high, moderate, or low.

Expected reliability - a measure of how accurately the monitoring reflects the forestwide situation. A qualitative and class system is used to rate reliability (high, moderate, low).

5. Measurement frequency - the schedules of samples stated in parts of years or years. Includes some measure of sample size or number.
6. Reporting period - the reoccurring interval between reports summarizing monitoring results for a particular activity or practice. The sampling period should be long enough for specialists to capture significant information.
7. Variation which would initiate further evaluation/standard - a statement describing the tolerance limits within which actual performance can vary from predicted performance. When these limits are exceeded, further evaluation is triggered.



TABLE V-1  
MONITORING REQUIREMENTS

ACTIVITY, PRACTICE OR EFFECT	MONITORING TECHNIQUES OR DATA SOURCES	PRECISION/ RELIABILITY	MEASUREMENT FREQUENCY	REPORTING PERIOD	CONDITIONS WHICH WOULD INDICATE FURTHER EVALUATION
<u>Wildlife</u>					
Wildlife Management Indicator Species - Populations and/or habitat trends	Aerial WR surveys and population estimates, check station data, etc., from IF&G, Stage II inventories, WHP model data; Range inventory data, breeding bird surveys, etc.	M-H/M-H	Annually for big game species - Two to five years intervals for all others. Annually for status of old growth retention stands.	Same	+25% deviation in populations or significant differences in population estimates versus habitat trends.
Threatened or Endangered Species - Population and/or habitat trends	Maintain observation records and investigate all sight- ings (except winter Bald Eagle survey; Wolf howling surveys and Peregrine nesting surveys. Continue Gray Wolf Habitat Coordina- tion Project.	M-H/M	Annually for sightings and NWF's Bald Eagle survey. Two to five year intervals for all others.	Same	Any change from Current Status
Habitat Improvement Accomplishment and Results	Annual Wildlife Report and attainment reports.	M/H	Annually	Same	
Standard and Guideline Conformance	Post-Project ID Team Field Review	M-H/M-H	Annually for two major projects each year.	Same	Significant deviation from prescription parameters.

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<u>Fish</u>					
Anadromous Fish (steelhead - salmon) Rearing populations and habitat quantity and quality	R-4 GAWS, core and embeddedness sampling, snorkle/electro fish counts, redd surveys, angler use surveys	M-H/M-H	Variable depending on technique	1-5 year interval	5% increase in sediment in excess of objective level; adverse stream flow; 20% change in rearing habitat quantity or quality.
Resident Fish Habitat quantity and quality	R-4 GWS, core and embeddedness sampling snorkle/electro fish counts, angler use surveys	M-H/M-H	Variable depending on technique	1-5 year	10% increase in sediment in excess of objective level, adverse stream flows; 20% change in habitat quality or quantity.

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<u>Range</u>					
Range Forage Impr.	Site analysis and photo trend studies	M/M	Before treatment and 2nd and 5th growing seasons after treatment.	5th year	
Forage Utilization, compliance with Allot- ment Mgmt. Plan direc- tion and criteria	Documented field examina- tions	M/M	As prescribed in section of the AMP.	Same	Described in the followup section of the AMP.
Vegetative and Soil Trends	Nested frequency, site analysis and photo trend studies.	H/M	As prescribed in the followup sec- tion of the AMP	Same	Same
Predator Losses	Documented field observa- tions, summarization of permittee's reported losses in annual grazing plans.	M/M	Annual	Annual	Losses exceed 2%

TABLE V-1  
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<u>Timber</u>					
Adequate restocking of lands within 5 years of final harvest	Stand exam	H/H	1st, 3rd, and 5th year after planting	5th year	Suitable lands fail to be regenerated within 5 years.
Maximum size of open- ings created by even- aged management	Review of Timber Sale map and silvicultural prescriptions	M/M	Each sale	10 years	Openings exceed maximum size.
Timber Sale Action program	Review 5 year action plan to ascertain that timber sales will be offered as scheduled and volume will not exceed 10 year allow- able sale quantity.	M/M	Annual	Annual	Timber sales not progressing as scheduled or annual volume is not being offered or sold if offered.
Classification of suitable and unsuit- able lands	Examine lands during silvicultural exams, timber sales, and inventories to verify classification	H/H	Continuing on project basis prior to Forest Plan update	10 years or Forest Plan update	10% of suitable or unsuitable incorrectly classified.
Reforestation and TSI accomplished	Review TSI and Reforestation accomplishment reports	H/H	Annual	Annual	Failure to meet targets, accom- plish KV needs in timber sale plans.
Fuelwood Consumption and supply	Review permits issued and quantity sold	M/M	Annual	Annual	Significant drop in permits and/or quantity would indicate that supply is inadequate or that demand has dropped.

TABLE V-1  
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<u>Soils</u>					
Sequential photo points of ORV damage	Standard methods	M/M	Annual	Annual	Closures of areas upon evidence of watershed damage.
Recognize and establish benchmark soils that are representative of large areas	Standard SCS methods	H/H	Continuous	Annual	Initiate further investigation after establishing representa- tive sampling sites.
Comparing erosion for various forest practices	Quantify erosion by erosion troughs, and/or fabric cloth, and using the 3-F erosion bridge method	H/M	4 plots/year	Biannual	Exceeding local soil loss tolerance level evaluation.
Ground disturbing activities that have the potential to alter soil productivity	Monitor project level activities on sandy soils derived from the Idaho and/or Montana batholith, and clayey soils derived from the Challis volcanics by the following tech- niques: Visual estimates, re- mote sensing by using photo points; on ground transects which monitor amount and condi- tion of ground cover; soil moisture and temperature measurements; fertility and soil nutrient analysis; measurement of bulk density.	H/H	Annually, sample 10% of all ground disturbing activi- ties	Annual	Any deviation from management direction, standards and guide- lines, on soil resources.
Soil survey activities	Progress reviews, Management Attainment Report		Annually, fiscal year program of work target.	Annual	+25% of Plan direction
Stability Areas - Unstable areas caused by natural conditions	Monitor by photo points and/or ground measurements.	H/H	Annual	Annual	Loss of roads, blockage of creeks or streams where downstream damage, life, or property is



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<u>Water</u>					
Changes in water quality due to land management activities	Water quality, sampling flow measurement				
a) Baseline		M/M	Weekly-Monthly	Annual	Failure to meet State water quality standards
b) Project		H/M	Daily-Weekly	Annual	
Compliance with State Health and Sanitation Codes to protect public health and safety	Bacteriological sample of potable water supplies	H/L	Bi-weekly	Annual	Failure to meet State water quality standards
Flow increases due to timber harvest	Peak flow crest gauging	H/H	Annual	Annual	Change in R1/R4 channel stability rating to poor.
Changes in riparian areas due to land management	Sequential photo points	H/M	3-5 years	3-5 years	Failure to meet Forest Riparian Management Standards
Ocular comparisons of erosion on inslope versus outslope roads, cut slopes versus fill slopes road treads and on trails	Ocular reporting	L/L	Whenever erosion is observed	Annual	Erosion rate exceeding predicted effect of project design
Changes in stream channel stability due to land management activities; baseline and project	R1/R4 Channel Stability Analysis	M/M	3-5 years	3-5 years	Changes in stream rating to "poor" rating
Extent of stream channel deposition resulting from land management activities	Core sampling in coopera- tion with fisheries	M/M	3-5 years	3-5 years	Failure to meet State water quality standards or FLMP objective levels

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<u>Minerals</u>					
Compliance with terms of operating plans (locatable minerals)	Field examinations	H/H	During operations	Annual	Any unacceptable or unexpected results that deviate from the environmental assessment report
Reclamation results	Field examinations	H/H	Annually on 25% of the sites that have been closed 2-3 years	Annually	Any unacceptable or unexpected results that deviate from the environmental assessment report
Lease stipulations and forms	Evaluate adequacy of lease requirements through field examination	H/H	Annually	Annually	Lease requirements are found inadequate to meet FLMP objectives
Activity in designated gravel and/or riprap sources	Field examination	H/H	Annually	Annually	Problems are found which do not meet FLMP objectives

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<u>Air Quality</u>					
Whether Idaho State Air Quality guide- lines and standards are met	Compliance with weather forecast, burning index and visual observation of smoke dispersal	M/M	Ongoing	Any violation	Adverse public reaction or settling of smoke into inhabited areas.

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<u>Fire</u>					
Adequacy of fire prevention programs	Measure of number and size of person-caused fires.	H/H	Annual	5 years	20% increase in cumulative 5 year average
Number of wildfires and acres burned	Frequency by size distribu- tion, intensity level and acres burned.	H/H	Annual	5 years	20% increase in cumulative 5 year average in any of the factors.
Fire Management Effectiveness index (FMEI)	Evaluate cost plus net value change during fire planning	M/M	Annual	5 year	20% increase in FMEI (FFP+FFF+NVE --- FSH 5109.19)
Whether fuel loading from resource activi- ties is reduced to standards	Field measurements after activity or fuel treatment	M/M	Sample 30% of projects	5 years	Exceeding fuel level guidelines by 10% or failure to meet targets

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<u>Insects and Disease</u>					
Survey of population levels of insects and diseases	Aerial surveys by R-4 FPM	M/M	Annual, except Leadore District every 2 years	Annual	As recommended by entomologist. (MPB, spruce and DF bark beetles, spruce budworm, dwarf mistletoe)
Effectiveness of dwarf mistletoe or other suppression projects to protect regeneration.	Field reviews	H/H	Followup on projects	5 years	Infestation in regeneration of pre-commercial thinned areas.



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<u>Lands</u>					
Special use permit administration and inspection	Land use reports and inspec- tion reports	H/M	Sample basis as scheduled in annual work plan	Annual	Deviation from terms and conditions of the permit
Landline location	Management Attainment Report	H/H	Annual	Annual	+10% of planning period target
Occupancy trespass	Survey reports, Management Attainment Report	H/M	Annual	Annual	A stable or increasing number of trespass cases
Road and Trail R-O-W acquisitions	Management Attainment Report - Item 34	H/H	Annual	Every 2nd year	If accomplishment in the first six years is less than 50% of the plan's program, evaluate the program. If adjustments are required, place them in the next plan period.

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Developed Recreation- Amount & Distribution of actual use compared with projections	-Random sample	M/M	5 years	5 years	+20% change for 5 year projec- tion. Use of an individual site exceeds 60% of theoretical capacity for the summer season
Developed Recreation- Site & Facility Condition	RIM Facility Condition Report	H/H	Annual	Annual	Deterioration of site beyond that anticipated under normal use
Dispersed Recreation- Amount and distribu- tion of actual use compared with projec- tions	RIM use sampling including road & trail traffic counts	L/L	Annual	Annual	+20% change for 5 year projec- tion. +10% of ROS capability criteria
Dispersed Recreation- Site Condition	Site inspection using Frizzell method	M/M	5 years	5 years	Dispersed sites rated Frizzell condition Class 4 or 5
Dispersed Recreation- Off-road vehicle travel	Field observation, public comments, public involve- ment with Travel Plan	M/M	Annual	Annual	ID Team Review indicates unacceptable increase in resource damage due to ORV use, or increase in substantiated complaint letters from the public
Dispersed Recreation- Trail Condition	Trail Condition Surveys, Public Comments	H/L	Portions of the System Annually	Annual	Trail mileage classed as sub- standard exceeds management ob- jectives or increase in sub- stantiated complaint letters from the public.

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<u>Facilities</u>					
Road Construction (miles)	Accomplishment Report	H/H	Annual	5 years	Only when mileage actually constructed <u>exceeds</u> planned mileage by 10%
Road Reconstruction (miles)	Accomplishment Report	L/L	Annual	5 years	Only when mileage actually constructed <u>exceeds</u> planned mileage by 10%
Road Closures	Travel Plan	M/M	Annual	Annual	If 15% of the <u>newly constructed</u> roads are open without meeting the stated criteria; or if 15% of the existing roads are closed without meeting the stated criteria

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Visual Resource- Compliance with visual quality objectives	Field Observation and photo documentation of completed projects	H/L	Annual	Annual	Noncompliance with assigned Visual Quality Objectives
Cultural Resources- Project compliance with management requirements on undertakings which may affect significant cultural values	Field observation	M/L	Annual	Annual	Cultural Resource Properties being damaged/destroyed direct- ly/indirectly by unauthorized use or controllable natural agents
Cultural Resources- Monitoring of known sites for natural deterioration and vandalism	Field Observation	H/L	Biannual for public roaded access sites  5 years for iso- lated sites	Biannual	Property being damaged or de- stroyed by direct or indirect causes by unauthorized use or controllable natural agents
Wilderness- Amount and distribu- tion of actual use compared with projec- tions	-RIM use sampling -Trailhead registration -Trail counters	M/L	Annual	Annual	+20% change for 5 year projec- tion. +10% of ROS capacity criteria
Wilderness- Campsite condition	Limits of Acceptable Change Studies	H/L	5 years	5 years	Limits of Acceptable Change Analysis shows that the condi- tion class has declined one class on 25% of inventoried sites

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<u>Economics</u>					
Capital Investments	Forest Reports	H/H	Annual	Annual	Meet Forest Plan objectives and assigned targets
Returns to U.S. Treasury	Forest Reports	H/H	Annual	Annual	Monitor for effect
Receipt shares to Counties	Forest Reports	H/H	Annual	Annual	Monitor for effect
Number of person years to implement plan	Forest Reports	H/H	Annual	5 years	Not more than 5% deviation from estimated FTE's
Unit Costs for Planning Activities	Forest Reports - ADVENT Data	H/H	Annual	Annual	Not more than 20% deviation from estimated cost on a forestwide basis



### C. AMENDMENTS AND REVISIONS

During Plan implementation, activities may be proposed that were not specifically addressed or foreseen in the Planning/EIS process. Examples are new mining claims and filing of operating plans, mineral lease development, special use applications, and land exchange opportunities. Depending upon the scope and magnitude of each proposal, a determination will be made on whether the Plan must be amended.

The Forest Supervisor may amend the Forest Plan. Based on an analysis of the objectives, guidelines, and other contents of the Forest Plan, the Forest Supervisor shall determine whether a proposed amendment would result in a significant change in the Plan. If the change resulting from the proposed amendment is determined to be significant, the Forest Supervisor shall follow the same procedure as that required for development and approval of a Forest Plan. If the change resulting from the amendment is determined not to be significant for the purposes of the planning process, the Forest Supervisor may implement the amendment following appropriate public notification and satisfactory completion of NEPA procedures.

In determining whether a proposed amendment is significant, the scope and magnitude of the proposal will be evaluated in regards to its effect upon the Preferred Plan Alternative contained in the Final EIS. Would the Preferred Alternative be significantly changed, requiring a new analysis? Would the decision criteria presented in the Record of Decision no longer support the preferred alternative? Should such be the case, then the original EIS would be amended, showing the change.

The Forest Supervisor may change proposed Forest Action schedules to reflect differences between proposed annual budgets and appropriated funds. Such scheduled changes shall be considered an amendment to the Forest Plan, but shall not be considered a significant amendment, or require the preparation of an environmental impact statement, unless the changes significantly alter the long-term relationship between levels of multiple-use goods and services projected under planned budget proposals as compared to those projected under actual appropriations.

A Forest Plan shall ordinarily be revised on a 10-year cycle or at least every 15 years. It also may be revised whenever the Forest Supervisor determines that conditions or demands in the area covered by the Plan have changed significantly or when changes in RPA policies, goals, or objectives would have a significant effect on Forest level programs. In the monitoring and evaluation process, the interdisciplinary team may recommend a revision of the Forest Plan at any time. Revisions are not effective until considered and approved in accordance with the requirements of the development and approval of a Forest Plan. The Forest Supervisor shall review the conditions on the land covered by the Plan at least every five years to determine whether conditions or demands of the public have changed significantly.





## VI. GLOSSARY

Abiotic - Nonliving material components of the environment such as air, rocks, soil, water, and plant litter.

Access - See public access.

Acre Equivalent - The index of acres affected by wildlife habitat improvements in contrast to actual acres treated.

Acre-Foot - A measure of water or sediment volume equal to the amount which would cover an area of one acre to a depth of one foot (325,851 gallons).

Active Floodplain - The portion of the valley bottom which is frequently (every one to five years) inundated by high stream flows. This area is often evidenced by the existence of abandoned stream channels, high water marks, and deposition of debris and sediment.

Activity - The work processes or management practices that are conducted to produce, enhance, or maintain outputs or achieve administrative and environmental quality objectives (FSM 1309, Management Information Handbook). An activity can generate multiple outputs.

Activity Fuels - Logging debris generated from any activity on the Forest such as firewood gathering, precommercial thinning, timber harvesting, and road construction, which increases fire potential.

Activity Outputs - The quantifiable goods or services resulting from any management actions taken on the Forest.

Administrative Headquarters Site - A site which exists primarily for general administrative purposes. It normally will include office, warehouse, outside storage, and parking areas. It may include housing and pasture for livestock. A work center may be part of an administrative headquarters site.

Administrative Unit - All the National Forest System lands for which one Forest Supervisor has responsibility.

Affected Environment - The natural and physical environment under the administration of one line officer, such as District Ranger or Forest Supervisor.

Agricultural Base - Economy in which the base industry of a community is agriculture.

Airshed - A geographic area that, because of topography, meteorology, and climate, shares the same air. As applied to the National Forest by the Clean Air Act, amended August 1977, the term covers all wilderness areas larger than 5000 acres that were in existence as of August 1977.

Alignment - The specific surveyed location or route.

Allotment - See range allotment.

Allowable Sale Quantity - 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."

Alluvial - Pertaining to material that is transported and deposited by running water.

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

AMS - An abbreviation for Analysis of the Management Situation.

Anadromous Fish - Those species of fish that mature in the sea and migrate into streams to spawn; i.e., salmon, steelhead.

Analysis Area - One or more capability areas grouped for purposes of analysis. They are similar land areas of various sizes based on common impacts, effects, and social or economic factors.

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 amount of forage required by an animal unit (considered to be 1,000 lbs. for a cow) for one month.

Annual Forest Program - The summary or aggregation of all projects that make up an integrated (multifunctional) course of action, at a given level of funding for a Forest planning area, that is consistent with the Forest Plan.

Annual Work Planning Process - The process used to translate the objectives from the Regional Guide into specific activities to be carried out during one fiscal year.

Appropriate Costs - The sum of operational and capital investment costs including overhead.

Aquatic Ecosystems - The physical environment of or pertaining to water--stream channel, lake or pond bed, wetland, water itself--and biotic communities that occur therein.

Arterial Roads - Roads comprising the basic access network for National Forest System administrative and management activities. These roads serve all resource elements to a substantial extent, and maintenance is not normally determined by the activities of any one element. They provide service to large land areas and usually connect with public highways or areas or other Forest arterial roads to form an integrated network of primary travel routes. The location and standard are often determined by a demand for maximum mobility and travel efficiency rather than by a specific resource management service. Usually, they are developed and operated for long-term land and resource management purposes and constant service.

Assessment - The Renewable Resource Assessment required by the Resources Planning Act (RPA).

Available, Capable, and Suitable - See available forest lands, capable lands, and suitable lands.

Available Forest Land - Land which has not been legislatively withdrawn or administratively withdrawn by the Secretary of Agriculture or Forest Service Chief from timber production.

Average Annual Cut - The volume of timber harvested in a decade, divided by 10; used as a basis for comparison of alternatives, not as a measure of nondeclining yield.

Avoidance Areas - Areas having one or more physical, environmental, institutional, or statutory impediments to corridor designation.

There are two types of avoidance areas:

- A. Discretionary--areas that may be crossed by corridors only if necessary and reasonable mitigation or avoidance of significant impacts can be obtained.
- B. Nondiscretionary--areas that may not be crossed by corridors unless authorized by the appropriate official (for example, Governor, President).

Background - The visible terrain beyond the foreground and middle-ground where individual trees are not visible but are blended into the total fabric of the stand. (See "Foreground" and "Middleground.")

Basal Area - The area of the cross-section of a tree stem near the base, generally at breast height and inclusive of bark.

Base Area - The public or private land used to support a recreation operation that depends on use of National Forest System land for its viability. Usually used to describe the base facility of a ski area.

Base Property - Those lands in a ranching enterprise which are owned by the operator and are considered as the basis for a term grazing permit.

Base Sale Schedule - A timber sale schedule formulated on the basis that the quantity of timber planned for sale and harvest for any future decade is equal to or greater than the planned sale and harvest for the preceding decade, and this planned sale and harvest for any decade is not greater than the long-term sustained yield capacity. (This definition expresses the principle of nondeclining flow.)

Baseline - With respect to soils, the amount of erosion and sedimentation due to natural sources in the absence of human activity.

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 - The total value of an output or other effect.

Benefit Cost/Ratio - Measure of economic efficiency computed by dividing total discounted primary benefits by total discounted economic costs.

Best Management Practices (BMP) - A practice or combination of practices that are the most effective and practical (including technological, economic, and institutional considerations) means of preventing or reducing the amount of pollution generated by nonpoint sources to a level compatible with water quality goals.

Big Game - Those species of large mammals normally managed as a sport hunting resource.

Big Game Winter Range - The area available to and used by big game through the winter season.

Biological Capacity - The average net growth of wood attainable under intensive management.

Biological Control - A method to control insect populations or tree diseases through the use of antagonistic organisms.

Biological Growth-Potential - The average net growth attainable in a fully stocked natural forest stand.

Biological Potential - The maximum possible output of a given resource, limited only by its inherent physical and biological characteristics.



Board Feet - The amount of wood equivalent to a piece of wood one foot by one foot by one inch thick. Generally, five board feet log measure is approximately equivalent to one cubic foot of round wood.

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. For the Salmon, the average conversion varies by alternative and benchmark.

Boreal - Of, or pertaining to, the north.

British Thermal Unit - The amount of heat required to raise the temperature of one pound of water one degree Fahrenheit.

Broadcast Burn - Allowing a prescribed fire to burn over a designated area within well-defined boundaries for reduction of fuel hazard or as a silviculture treatment, or both.

Browse - Twigs, leaves, and young shoots of trees and shrubs on which animals feed; in particular, those shrubs which are utilized by big game animals for food.

BTU - An abbreviation of British Thermal Unit.

Cable Logging - A method for transporting logs from stumps to collecting points which utilizes a cable system as the main device for moving them.

Canopy - The more-or-less continuous cover of branches and foliage formed collectively by the crown of adjacent trees and other woody growth.

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 the application of management practices, such as silviculture or protection from fire, insects, and disease.

Capable Lands - Those portions of the Forest that have an inherent ability to support trees for timber harvest and produce at least 20 cubic feet/acre/year of wood fiber.

Capital Investment Costs - Those associated with construction or development of improvements; includes road construction, reforestation, campground construction, range improvements, etc.



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

Cavity - The hollow excavated in trees by birds or other natural phenomena; used for roosting and reproduction by many birds and mammals.

CEO - See "Council on Environmental Quality."

CFR - Code of Federal Regulations.

Chemical Control - A method to control insect populations, noxious weeds, undesirable vegetation, tree diseases, or other pests through the use of applied chemicals.

Clearcutting - The cutting method that describes the silviculture system in which the old crop is cleared over a considerable area at one time. Regeneration then occurs from (a) natural seeding from adjacent stands, (b) seed contained in the slash or logging debris, (c) advance growth, or (d) planting or direct seeding. An even-aged forest usually stands.

Climax - The highest ecological development of a plant community capable of perpetuation under the prevailing climactic and edaphic conditions.

Closure - The administrative order restricting either location, timing, or type of use in a specific area.

Coliform Bacteria - Any of several bacteria found in the large intestine of man and animals, the presence of which indicates fecal pollution.

Collector Roads - Roads constructed to serve two or more elements but which do not fit into the other two categories (arterial or local). Construction costs of these facilities are prorated to the respective element served. These roads serve smaller land areas and are usually connected to a Forest arterial or public highway. They collect traffic from Forest roads or terminal facilities. The location and standard are influenced by both long-term, multi-resource service needs and travel efficiency. Forest collector roads are operated for constant service.

Commercial Forest Land (CFL) - See "Timber classification."

Commodities - Products produced from a parcel of land; e.g., outputs of wood, livestock forage, and minerals.

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

Community Lifestyles - The ways in which residents conduct their everyday routines and how the "way they live" is associated with the National Forest.

Community Stability - The capacity of a community to absorb and cope with change without major hardship to institutions or groups within the community.

Concern - See "management concern."

Confinement - To restrict the fire within determined boundaries established either prior to the fire, during the fire, or in an escaped fire situation analysis. The normal tactic is surveillance only.

Congressionally Classified and Designated Areas - Areas which require Congressional enactment for their establishment, such as National Wilderness, National Wild and Scenic Rivers, and National Recreation Areas.

Conifer - Those cone-bearing trees, mostly evergreen, including the pine, spruce, fir, etc.

Constraint - A mathematical equation used to insure the outputs, effects, standards, and Forest conditions are included in the right proportions needed to achieve the particular objectives of the alternative in the computer model.

Consumptive Use - A use of resources that reduces the supply, such as logging and mining (see also nonconsumptive use).

Containment - To surround a fire, and any spot fires therefrom, with control line, as needed, which can reasonably be expected to check the fire's spread under prevailing and predicted conditions. The normal tactic is indirect attack and burn to human-made or natural barrier with little or no mop-up.

Control - 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. The normal tactic is direct attack on the fire, if possible, and mop-up.

Corridor - A linear strip of land identified for the present or future location of transportation or utility rights-of-way within its boundaries.

Cost Effectiveness - Achieving specified outputs or objectives under given conditions for the least cost.

Cost-Efficiency - The usefulness of specified inputs (costs) to produce specified outputs (benefits). In measuring cost efficiency, some outputs, including environmental, economic, or social impacts, are not assigned monetary values but are achieved at specified levels in the least cost manner. Cost efficiency is usually measured using present net value, although use of benefit-cost ratios and rates-of-return may be appropriate.

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

Cover/Forage Ratio - The ratio of cover (usually conifer types) to foraging areas (natural openings, clearcuts, etc.).

Critical Habitat - Areas designated by Secretary of the Interior or Commerce for the survival and recovery of federally listed threatened and endangered species.

Critical Minerals - Minerals essential to the National defense, but whose procurement, while difficult in case of war, is less serious than those of strategic minerals.

Crown Height - Of a standing tree, the vertical distance from ground level to the base of the crown measured either to the lowest live branchwhorl or to the lowest live branch (excluding shoots arising spontaneously from buds on the stem of a woody plant) or to a point halfway between.

Cryoplanated Lands - Those lands expressing a reduced surface by processes associated with frost action.

Cubic Foot - The amount of timber equivalent to a piece of wood one foot by one foot by one foot.

Cubic Yard - A measure of soil or sediment volume which would cover a square yard of area one yard deep (3 feet x 3 feet x 3 feet).

Cull - Any item of production; e.g., trees, logs, lumber, picked out for relegation or rejection because it does not meet certain specifications.

Culmination of Mean Annual Increment - The point where the mean annual growth increment (the basal area of a stand of trees divided by their age) ceases to increase prior to decline.

Cultural Resource - The remains of sites, structures, or objects used by humans in the past--historical or archeological.

Cultural Sensitivity - Refers to the likelihood of encountering significant cultural volumes (quantity and/or quality) which may affect and be affected by ground-disturbing activities.

Cutting Cycle - The planned lapse of time between successive cuttings in a stand.

DBH - Diameter at breast height. The diameter of a tree measured 4 feet 6 inches above the ground.

Decision Criteria - Essentially the rules or standards used to evaluate alternatives. They are measurements or indicators that are designed to assist a decision maker to identify a preferred choice from the array of possible alternatives.

Decking Areas - Sites that are intermediate between stump and landing, used to collect logs.

Deficit Timber Sale - A timber sale where the costs associated with producing the primary product(s) plus profit margin are greater than the selling value of the same product(s).

DEIS - An abbreviation for Draft Environmental Impact Statement.

Demand - The quantity of goods or services called for at various prices, holding other factors constant.

Departure - The temporary deviation from the nondeclining even-flow policy.

Dependent Communities - Communities whose social, economic, or political life would become discernibly different in important respects if market or nonmarket outputs from the National Forests were cut off.

Design Capacity - The maximum theoretical amount of use a developed recreation site was built to accommodate.

Design Standard - Approved design and construction specifications mainly used for recreation facilities and roads--includes specified materials, colors, dimensions, etc.

Designated Corridor - A linear area of land with defined and recognized boundaries identified and designated by legal public notice.

Destination Resort - A recreation resort designed for multi-day use in contrast to day use.

Determinate Stand - A group of trees of similar age and species composition that are clearly a separate group from surrounding stands.

Developed Recreation Site - Relatively small, distinctly defined area where facilities are provided for concentrated public use; e.g., campground, picnic areas, swimming areas.

Direct Outputs - Resource outputs that are caused by the action and occur at the same time and place.

Direction - See "management direction."

Discount Rate - An interest rate that represents the cost or time value of money in determining the present value of future costs and benefits.

Discounting - An adjustment, using a discount rate, for the value of money over time so that costs and benefits occurring in the future are reduced to a common time, usually the present, for comparison.

Disposal (of Federal lands) - Passing land from Federal to other ownership.

Distance Zone - One of three categories used in the Visual Management System to divide a view into near and far components. The three categories are: 1) Foreground; 2) middle ground, and, 3) background.

District - See "Ranger District."

Diversity - The distribution and abundance of different plant and animal communities and species within the area covered by a Land and Resource Management Plan. See also "Edge," "Horizontal Diversity," and "Vertical Diversity."

Draft Environmental Impact Statement - The statement of environmental effects which is required for major Federal actions under Section 102 of the National Environmental Policy Act, and released to the public and other agencies for comment and review.

Early Forest Succession - The biotic community that develops immediately following the removal or destruction of the vegetation in an area.

EAT - An abbreviation for the Effects Assessment Team.

Economic Efficiency Analysis - An analytical method in which incremental market and nonmarket benefits are compared with incremental economic costs.



Economic Growth - Increased economic output in real terms over time.

Economics - The study of how scarce resources are allocated among competing ends.

Ecosystems - An interacting system of organisms considered together with their environment; for example, marsh, watershed, and lake ecosystems.

Ecotone - A transition or junction zone between two or more diverse communities (ecosystems).

Edaphic - Pertaining to the soil.

Edge - Where plant communities meet or where successional stages or vegetation conditions within the plant communities come together. See also "edge contrast" and "horizontal diversity."

Edge Contrast - A qualitative measure of the difference in structure of two adjacent vegetative areas; for example, "low," "medium," or "high" edge contrast.

Effects - Environmental consequences as a result of 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 may also 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).

Effects Assessment Team - A group of people, the leader of which is an ID Team member, that determines the environmental (physical and biological), social and economic, effects of a given planning action of the Forest.

Electronic Sites - Areas designated for the operation of equipment which transmit and receive radio signals, excluding television aerials and antennas, for local pickup of programing and passive reflectors.

Endangered Species - Any species of animal or plant that is in danger of extinction throughout all or a significant portion of its range. Plants or animal species identified by the Secretary of the Interior as endangered in accordance with the 1973 Endangered Species Act.

Endemic - An organism whose natural occurrence is confined to a certain region and whose distribution is relatively limited.

Endemic Plant - A plant confined to a certain country or region and with a comparatively restricted geographic distribution.

Environmental Analysis - An analysis of alternative actions and their predictable short- and long-term environmental effects, which include physical, biological, economic, social, and environmental design factors and their interactions.

Environmental Assessment - The concise public document required by the regulations for implementing the procedural requirements of NEPA (40 CFR 1508.9).

Environmental Documents - A set of concise documents to include, as applicable, the Environmental Assessment, Environmental Impact Statement, Finding of No Significant Impact, or Notice of Intent.

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.

Ephemeral Stream - Streams that flow only as a direct response to rainfall or snowmelt events. They have no base flow.

Escape Areas - A place for deer to get away from danger.

Escape Cover - Usually, vegetation dense enough to hide an animal; an area used by animals to escape from potential predators.

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

Even-aged Silviculture - The combination of timber management actions that result in the creation of stands where trees of essentially the same age grow together.

Clearcutting - the removal, in a single cut, of all trees in stands larger than seedlings.

Seed tree cutting - Similar to clearcutting, except that a few of the better trees of the desired species are left scattered over the area to provide seed for regeneration.

Shelterwood cutting - The removal of all trees in a series of two or more cuts over a period of not more than 30 years.

Even-aged Systems - Product 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.

Even-flow - Maintaining a relatively constant supply of timber from decade to decade.

Exclusion Areas - Land areas determined to be unavailable for corridor allocation or facility siting for reasons of unsuitability, legislative classification, or prior, unalterable allocation of uses incompatible with the proposed use.

Expanded Suppression - The control or containment of wildfires at increased acreage within allowable fire intensity levels and fire control standards.

Experience Levels - The range of opportunities for satisfying basic recreation needs of people. A scale of five experience levels ranging from "primitive" to "modern" is planned for the National Forest System.

Extensive Grazing - Management seeks full utilization of forage allocated to livestock. Cost-effective management systems and techniques, including fencing and water development, are designed and applied to obtain relatively uniform livestock distribution and use of forage and maintain plant vigor.

Facilities - Improvements that are used for shelter or support of Forest Service programs. Examples include Ranger Station compounds, leased offices, housing areas, work centers, recreation complexes, and utility systems.

Facility Condition Class - The rating system used in the Recreation Information Management System to classify the condition of repair that a specific facility is in and maintenance needs of recreation sites and areas. Used for planning and budget request.



Family Unit - A developed site or picnic spot with table, fire-place, tent pad, and parking spot designed to handle a group of people.

FAT - An abbreviation for the Formulation of Alternatives Team.

Fault - A ground surface fracture or fracture zone along which there has been displacement of one side with respect to the other.

FC-RONRW - An abbreviation for the Frank Church--River of No Return Wilderness.

Federal Register - Published document that provides a uniform system for making available to the public regulations and legal notices issued by federal agencies.

Fee Ownership - Ownership of property that has no limitation, qualification, or condition affecting it and is the maximum possible ownership in real estate under the system of property rights founded on English common law.

Fee Purchase - Acquisition of fee ownership to a piece of property.

Fee Site - A Forest Service recreation area in which users must pay a fee. Fee sites must meet certain standards and provide certain facilities as specified in the Forest Service Manual.

FEIS - An abbreviation for Final Environmental Impact Statement.

Final Cut - Removal of the last seed bearers of shelter trees after regeneration is considered to be established under a shelterwood system.

Final Environmental Impact Statement - The document which describes the final Forest Plan.

Fire Hazard - The fuel in which a fire will ignite and burn.

Fire Management - All activities required for protection of resources from fire and the use of fire to meet land management goals and objectives.

Fire Risk - The potential cause of a fire.

Firewood - See fuelwood.

Fisheries Habitat - Streams, lakes, and reservoirs that support fish.

Flood Plains - The lowland and relatively flat area adjoining inland waters, including, at a minimum, that area subject to a one percent or greater chance of flooding in any given year.

Fluvial - Of, or pertaining to, streams and flowing waters.

Forage - All browse and nonwoody plants that are available to wildlife for grazing or harvested for feeding.

Forb - Any herbaceous plant other than true grasses, sedges, or rushes.

Foreground - A term used in visual management to describe the stand of trees immediately adjacent to the high-value scenic area, recreation facility, or forest highway. See "Background" and "Middleground."

Forest and Rangeland Renewable Resources Planning Act of 1974 - An Act of Congress requiring the preparation of a program for the management of the National Forests' renewable resources and of land and resource management plans for units of the National Forest System. It also requires a continuing inventory of all National Forest System lands and renewable resources. —

Forest Development Roads and Trails - A legal term for Forest roads or trails that are under the management of the Forest Service.

Forest Land - See "Timber classification."

Forest Plan Interdisciplinary Team - A group of people, the leader of which is the Forest Planner, charged with guiding the overall planning process and ensuring that the Plan is on schedule. The Team makes final determination on data to forward to the Management Team.

Forest Supervisor - The official responsible for administering the National Forest System lands in a Forest Service administrative unit, which may consist of two or more National Forests or all the Forests within a state. He reports to the Regional Forester.

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 designated as Forest development transportation facilities. (see arterial roads, collector roads, and local roads.)

Forest-wide Standard - A performance criterion indicating acceptable norms, specifications, or quality that actions must meet to maintain the minimum considerations for a particular resource. This type of standard applies to all areas of the Forest regardless of the other prescriptions applied.

Formulation of Alternatives Team - A group of people, the leader of which is an ID Team member, charged with developing a reasonable range of alternatives responsive to issues, concerns, and opportunities.

FORPLAN - A linear programming system used for developing and analyzing Forest planning alternatives.

FPID Team - An abbreviation for the Forest Plan Interdisciplinary Team.

Frank Church--River of No Return Wilderness - A Congressionally designated Wilderness covering 2.2 million acres in central Idaho, partly made up of land formerly the Idaho Primitive Area and the Salmon River Breaks Primitive Area.

FSH - Forest Service Handbook.

FSM - Forest Service Manual.

Fuel Break - A zone in which fuel quantity has been reduced or altered to provide a position for suppression forces to make a stand against wildfire. Fuel breaks are designated or constructed before the outbreak of a fire. Fuel breaks may consist of one or a combination of the following: natural barriers, constructed fuel breaks, manmade barriers.

Fuel Model - A simulated fuel complex for which all the fuel descriptions required by the mathematical fire spread model have been specified.

Fuel Treatment - The rearrangement or disposal of natural or activity fuels to reduce the fire hazard. Fuels are defined as both living and dead vegetative materials consumable by fire.

Fuels - Include both living plants and dead, woody vegetative materials which are capable of burning.

Fuels Management - The practice of planning and executing treatment or control of any vegetative material that adversely affects meeting fire management direction based upon resource management goals and objectives.

Fuelwood - Wood--round, split, or sawed, and generally otherwise refuse material--cut into short lengths for burning. Includes firewood.

Future Scenarios - A word picture of a fixed sequence of future events in a defined environment.

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 and Federal laws, codes, and regulations.

Geomorphology - That branch of both physiography and geology which deals with the form of the earth, the general configuration of its surface, and the changes that take place in the evolution of land forms.

Goal - A concise statement that achieves 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 and Services - The various outputs, including on-site uses, produced from forest and rangeland resources.

Granitics - Of, or pertaining to, or composed of, granite or granite-like rock. Soils derived from this parent material.

Grass/forb - An early Forest successional stage where grasses and forbs are the dominant vegetation.

Grazing Allotment - See range allotment.

Group Selection Cutting - The cutting method that describes the silvicultural system in which trees are removed periodically in small groups, resulting in openings that do not exceed an acre or two in size. This leads to the formation of an uneven-aged stand in the form of a mosaic of age-class groups in the same forest.

Growing Season - The months of the year during which a species of vegetation grows.

Growing Stock Level - The number or volume of trees growing in a Forest or in a specified part of it.

Guideline - An indication or outline of policy or conduct; i.e., any issuance that assists in determining the course of direction to be taken in any planned action to accomplish a specific objective.

Habitat - The place where a plant or animal naturally or normally lives or grows.

Habitat Diversity - See "Wildlife habitat diversity."

Habitat Diversity Index - A measure of habitat diversity improvement expressed as a percentage of optimum size class distribution that is achieved over time.

Habitat Effectiveness - See wildlife habitat effectiveness.

Habitat Grouping - Grouping of habitat types in logical categories to facilitate resource planning.

Habitat Type - The aggregate of all areas that support or can support the same primary vegetation at climax.

Hiding Cover - Vegetation that will hide 90 percent of an elk from the view of a human at a distance of 200 feet or less. The distance at which the animal is essentially hidden is called a "sight distance."

Highlead Logging - A method of transporting logs from the stumps to a collecting point by using a powered cable, passing through a block fastened high off the ground, to lift the front end of the logs clear of the ground while dragging.

Horizontal Diversity - The distribution and abundance of different plant and animal communities or successional stages across an area of land, the greater the number of communities, the higher the degree of horizontal diversity.

Host - An organism, on or within, which another organism feeds and develops.

ICO - Short for public issues, management concerns, and resource use and development opportunities.

Igneous - Rocks formed by solidification from a molten or partially molten state; e.g., various types of lava.

Immediate Suppression - Immediate control of wildfire as required by fuels and associated risk conditions.

Implementation - Those activities necessary to respond to the approved Land and Resource Management Plan.

Improvement Cutting - Removing trees of undesirable species, form, or condition from the main canopy in stands past the sapling stage to improve the composition and quality.

Incidental Grazing - Grazing use that occurs on lands not managed for the production of domestic livestock. May occur as a result of natural herd movement, trailing of livestock, or the use of domestic livestock in recreation.

Indeterminate Stands - A group of trees of similar age and species composition that has been invaded by other tree species to the point where the original group has lost its identity as a discrete unit.

Indicator Species - A plant or animal species adapted to a particular kind of environment. Its presence is sufficient indication that specific habitat conditions are also present.

Indirect Outputs - Outputs caused by the action but which are later in time or farther removed in distance, although still reasonably foreseeable.



Individual (Single) Tree Selection Cutting - The cutting method that describes the silvicultural system in which trees are removed individually, here and there, each year over an entire forest or stand. The resultant stand usually regenerates and becomes all-aged.

Induced Outputs - Outputs in the private sector induced by the direct outputs produced on the Forest.

Inherent Edge - Naturally occurring breaks between two or more elements of the environment.

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 Flow - Those nonconsumptive in situ quantities of water necessary to meet seasonal stream flow requirements to accomplish the purposes of the National Forests, including, but not limited to, maintenance of favorable conditions of water flow, fisheries, visual quality, and recreational opportunities at acceptable levels.

Integrated Pest Management - 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 population on various resource values, alternative regulation 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 plus selective use of pesticides.

Intensive Grazing - Grazing management that controls distribution of cattle and duration of use on the range, usually by fences, so parts of the range are rested during the growing season.

Intensive Management - A high investment level of timber management that includes use of precommercial thinnings, commercial thinnings, genetically improved stock, and control of competing vegetation.

Interdisciplinary Approach - The utilization of individuals representing two or more areas of knowledge and skills focusing on the same task, problem, or subject. Team member interaction provides necessary insight to all stages of the process.

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.

Intermittent Streams - A stream which flows only at certain times of the year when it receives water from springs or from some surface source such as melting snow in mountainous areas.

Intermountain Region - That part of the National Forest System which encompasses National Forests within the Intermountain Region (Utah, southern and central Idaho, western Wyoming, and Nevada).

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 Data and Information Collection - The process of obtaining, storing, and using current inventory data appropriate for planning and managing the Forest.

Irretrievable - Applies to losses of production, harvest, or commitment of renewable natural resources. For example, some or all of the timber production from an area is irretrievably lost during the time an area is used as a winter sports site. If the use is changed, timber production can be resumed. The production lost is irretrievable, but the action is not irreversible.

Irreversible - Applies primarily to the use of nonrenewable resources, such as minerals or cultural resources, or to those factors that are renewable only over long time spans, such as soil productivity. Irreversible also includes loss of future options.

Issue - A point, matter, or question of public discussion or interest to be addressed or decided through the planning process.

Jammer Logging - A method of transporting logs from stumps to collecting points which utilizes a light-weight, two-drum winch with a wooden spar, generally mounted to a vehicle. The jammer both skids and loads the logs.

Key Summer Range - That portion of the summer range essential for the continuation of both the pre and post-reproductive cycles for all wildlife species.

Key Winter Range - The portion of the year-long range where big game find food and/or cover during severe winter weather.

Kuchler Vegetation Types - Potential natural vegetation of the coterminous United States, classified by Kuchler.

Land Class - The topographic relief of a unit of land. Land classes are separated by slope, which coincides with the timber inventory process. The three land classes used in the Forest Plan are defined by the following slope ranges: 0 to 35 percent; 36 to 55 percent; and, greater than 55 percent.

Land Exchange - The conveyance of non-Federal land or interests in the United States in exchange for National Forest System land or interests in land.

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

Landline - For Forest Plan purposes, National Forest property boundaries.

Landline Location - Legal identification and accurate location of National Forest property boundaries.

Landownership Pattern - The National Forest System resource land base in relation to other landownerships within given boundaries.

Late Forest Succession - A stage of Forest succession where the majority of trees are mature or overmature.

"Leap Frog" Development Patterns - Suburban sprawl with undeveloped parcels of land in between subdivisions. This type of development is usually considered inefficient because public utilities, services, etc., cannot be consolidated.

Leasable Minerals - Coal, oil, gas, phosphate, sodium, potassium, oil shale, sulphur, and geothermal steam.

Less Than Standard, Manage To (Recreation) - Management of developed and dispersed recreation facilities and areas below optimum maintenance standards. See Standard, Manage To.

Linear Programing - A mathematical method used to determine the cost-effective allocation of limited resources between competing demands when both the objective; e.g., profit or cost, and the restrictions on its attainment are expressible as a system of linear equalities or inequalities; e.g.,  $y = x + bx$ .

Local Dependent Industries - Industries relying on National Forest outputs for economic activity.



Local Roads - Roads constructed and maintained for, and frequented by, the activities of a given resource element. Some use may be made by other element activities, but normally maintenance is not affected by such use. These roads connect terminal facilities with Forest collector or Forest arterial roads or public highways. The location and standard are usually determined by the requirements of a specific resource activity rather than by travel efficiency. Forest local roads may be developed and operated for either constant or intermittent service, depending on land use and resource management objectives for the area served by the facility.

Locatable Minerals - Those hardrock minerals which are mined and processed for the recovery of metals. May include certain nonmetallic minerals and uncommon varieties of mineral materials such as valuable and distinctive deposits of limestone or silica. May include any solid, natural inorganic substance occurring in the crust of the earth, except for the common varieties of mineral materials and leasable minerals.

Long-Term Sustained Yield Capacity - The highest uniform wood yield from lands being managed for timber production that may be sustained under a specified intensity of management consistent with multiple use objectives.

M - Thousand

Management Action - Any activity undertaken as part of the administration of the Forest.

Management Area - An area of land with similar management goals and a common management prescription.

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, the associated management prescriptions, and standards and guidelines for attaining them.

Management Indicator Species - A species selected because its population changes indicate effects of management activities on the plant and animal community. 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 Opportunity - A statement of general actions, measures, or treatments that address a public issue or management concern in a favorable way.

Management Plan Development Team - The group of people charged with the development and writing of the Forest Land and Resource Management Plan.

Management Practice - A specific action, measure, course of action, or treatment.

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

Management Program - A set of activities designed to achieve a specific outcome.

Management Standards and Guidelines - See standards and guidelines.

Management Team - The group, led by the Forest Supervisor, is composed of Branch Chiefs and District Rangers. Responsible for providing guidance, setting priorities, and giving necessary approval.

Market-Valued Outputs - Goods and services valued in terms of what people are willing to pay for them, as evidenced by market transactions.

Mature Timber - Trees that have attained full development, particularly height, and are in full seed production.

MAUM's - A symbol to indicate 1000 animal unit months of range forage.

Maximum Modification - See "Visual quality objectives."

MBF - Thousand board feet, a measure of wood volume.

MCF - Thousand cubic feet, a measure of wood volume.

Mean Annual Increment of Growth - The total increase of girth, diameter, basal area, height, or volume of individual trees, or a stand up to a given age divided by that age.

Merchantable - Stands or crops of trees of a size, quality, and condition suitable for marketing under given economic conditions, even if so situated immediately accessible for logging.

Metasediments - Partly metamorphosed sedimentary rocks.

Middleground - 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.")

Million Board Measure (MMBF) - A symbol to indicate 1,000,000 board feet of wood fiber volume, either in log form or after conversion into lumber.

Mineral Development - The preparation of a proven deposit for mining.

Mineral Entry - The filing of a mining claim for public land to obtain the right to any minerals it may contain.

Mineral Entry Withdrawal - The exclusion of the right of exclusive possession by the locator, of locatable mineral deposits and mineral development work on areas required for administrative sites by the Forest Service and other areas highly valued by the public. Public lands withdrawn from entry under the general mining laws and/or the mineral leasing laws.

Mineral Exploration - The search for valuable minerals on lands open to mineral entry.

Mineral Fractions - Small, irregularly shaped parcels of National Forest lands created by the presence of a number of mining patents haphazardly located.

Mineral Production - Extraction of mineral deposits.

Mineral Soil - Weathered rock materials without any vegetative cover.

Minimum Streamflows - A specified level of flow through a channel that must be maintained by the users of streams for biological, physical, or other purposes.

Mining Claims - That portion of the public estate held for mining purposes in which the right of exclusive possession of locatable mineral deposits is vested in the locator of a deposit.

MIS - An abbreviation for Management Indicator Species.

Mitigate - To lessen the severity.

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

MM - Million

MMBF - Million board feet.

MMCF - Million cubic feet.

Modification - See "Visual quality objectives."

Monitoring and Evaluation - The periodic evaluation on a sample basis of Forest Plan management practices to determine how well objectives have been met and how closely management standards have been applied.

Monitoring Team - Two or more individuals assigned to an Evaluation Fire to observe, measure, and report fire behavior and fire effects.

Morphology - The study of the form and structure of land or organisms.

Mortality - Trees of commercial species, standing or down, that have died during a specified period, and were not cull trees at the time of death.

Mosaic of Forest and Openings - Areas with trees and areas without trees occurring in interrupted sequence.

Mountain Pine Beetle - A tiny black insect, ranging in size from 1/8 to 3/4 inch, that bores its way into the tree's cambium and cuts off its supply of food, thus killing the tree.

MPDT - An abbreviation for the Management Plan Development Team.

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.

National Environmental Policy Act (NEPA) - An Act to declare a National policy which will encourage productive and enjoyable harmony between man and his environment, to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man, to enrich the understanding of the ecological systems and natural resources important to the Nation and to establish a Council on Environmental Quality.

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

National Forest Landscape Management System - The art and science of planning and administering the use of Forest lands in such ways that the visual effects maintain or upgrade man's psychological welfare. It is the planning and design of the visual aspects of multiple-use land management.

National Forest Management Act (NFMA) - A law passed in 1976 as an amendment to the Forest and Rangeland Renewable Resources Planning Act requiring the preparation of Regional Guides and Forest Plans and the preparation of regulations to guide that development.

National Forest System (NFS) Lands - National Forests, National Grasslands, or purchase units, and other lands under the management of the Forest Service, including experimental areas and Bankhead-Jones Title III lands.

National Recreation Trails - Trails designated by the Secretary of the Interior or the Secretary of Agriculture as part of the National system of trails authorized by the National Trails System Act. National Recreation Trails provide a variety of outdoor recreation uses in or reasonably accessible to urban areas.

National Register of Historic Places - A listing (maintained by the U.S. National Park Service) of areas which have been designated as being of historical significance. The Register includes places of local and State significance as well as those of value to the Nation.

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

Natural Barrier - A natural feature that will restrict livestock movements such as a dense stand of trees or downfall.

Natural Catastrophic Condition - A significant change in forest conditions on the area that affects Forest Plan resource management objectives and their projected and scheduled outputs, uses, costs, and impacts on local communities and environmental quality.

Natural Fire - Fire which is neither planned nor started by man.

NEPA - An abbreviation of National Environmental Policy Act.

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 values 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.



NFMA - An abbreviation for National Forest Management Act of 1976 (The).

NFRS - Inventoried National Forest Recreation Sites.

Niche - A site or habitat supplying the factors characteristically necessary for the successful existence of an organism or species. Also, the role of an organism in an ecological community.

No-Action Alternative - The most likely condition expected to exist in the future if current management direction were to continue unchanged.

Noncommercial Vegetative Treatment - The removal of trees for other than timber production purposes.

Noncommodity Outputs - A resource output that cannot be bought and sold.

Nonconsumptive Use - Those uses of resources that do not reduce the supply; for example: Nonconsumptive uses of water included hydroelectric power generation, boating, swimming, etc.

Nondeclining Flow - The principle expressed by the definition of the base sale schedule.

Nongame - Species of animals which are not managed as a sport hunting resource.

Nonmarket-Valued Outputs - Goods and services not generally traded in the marketplace, but valued in terms of what reasonable people would be willing to pay for them rather than go without. Those obtaining the actual outputs do not necessarily pay what they would be willing to pay for them.

Nonpoint Source Pollution - Sources of pollution that are diffuse in origin, their transportation into receiving water not well defined or constant, their discharge occurring at many diffuse locations, and depending heavily on weather conditions such as rainstorms or snowmelt. Pollution from Forest management is of this type.

Nonwinter Ranges - Any area of the Forest not included in the definition of big game winter range.

No Surface Occupancy - A mineral lease clause that permits passive activities such as seismic exploration or directional drilling from adjacent areas, but prohibits drilling or the occupancy of the surface.

Notice of Intent - Written notice to the affected District Ranger, by those who intend to engage in mining activity on the Forest, of proposed prospecting, exploration, mining, and mineral processing activities. Also, a notice in the Federal Register of intent to prepare an Environmental Statement on a proposed action.

Noxious Weeds - A plant species that is undesirable; conflicts, restricts, or otherwise causes problems with the management objectives.

NPB - An abbreviation of net public benefits.

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.

Occupancy Trespass - The illegal occupation or possession of National Forest land or property.

Off-Road Vehicle (ORV) - Vehicles such as motorcycles, all-terrain vehicles, four-wheel drive vehicles, and snowmobiles.

Old Growth - A stand of trees that is past full maturity and showing decadence; the last stage in forest succession.

Old Growth Habitat - Habitat for certain wildlife that is characterized by overmature coniferous forest stands with large snags and decaying logs.

Oligotrophic - Lakes having low nutrient supplies which are poor producers of organic matter.

Operational Costs - Those costs associated with administering and maintaining National Forest facilities and resource programs.

Operational Plan - A written document approved by the Forest Supervisor which provides specifically, at the project level, for implementation of the management direction established in the Forest Plan.

Opportunity - See management opportunity.

Optimum - A level of production that is consistent with other resource requirements as constrained by environmental, social, and economically sound conditions.

ORV - An abbreviation for Off Road Vehicles.

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

Over the Counter Sale - The selling of Forest products, as requested by the general public, without bidding. Usually for products such as fuelwood, corral poles, ornamental shrubs, etc.

Overflow Camping - Developed site camping that occurs in excess of designed site capacity.

Overmature Timber - Trees that have attained full development, particularly in height, and are declining in vigor, health, and soundness.

Overstory - That portion of the trees, in a Forest of more than one story, forming the upper or uppermost canopy.

PAOT - An abbreviation for Persons At One Time.

Parent Material - The unconsolidated, chemically weathered mineral or organic matter from which the upper layers of soil are developed. Parent rock is the original rock from which sediments were derived to form later rocks, or the rock from which parent materials of soils are formed.

PARS - The burned acreage and fire occurrence guidelines which represent the annual average long-term fire loss. PARS are expressed by size class and fire intensity levels.

Partial Retention - See "Visual quality objectives."

Particulates - Small particles suspended in the air and generally considered pollutants.

Patented Lands - Those lands which were formerly in Federal ownership which were deeded over to private individuals.

Patented Mining Claim - A patent is a document which conveys title to land. When patented, a mining claim becomes private property and is land over which the United States has no property rights, except as may be reserved in the patent. After a mining claim is patented, the owners do not have to comply with requirements of the General Mining Law or implementing regulations.



Payment in Lieu of Taxes - Payments to local or State governments based on ownership of Federal land and not directly dependent on production of outputs or receipt sharing. Specifically, they include payments made under the Payments in Lieu of Taxes Act of 1976 by U.S. Department of the Interior.

Percent Slope - Change of elevation (in feet) over a 100-foot distance.

Perennial Stream - Streams that flow throughout the year and from source to mouth.

Permitted Grazing - Use of National Forest land under the provisions of a grazing permit.

Person-year - Approximately 2080 working hours. May be filled by one person working year long or several people filling seasonal positions.

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) - A recreation capacity measurement term indicating the number of people who can use a facility or area at one time.

Petroglyphs - A prehistoric rock carving.

Phenology - The science that deals with the time of appearance of characteristic periodic phenomena in the life cycle of organisms in nature, e.g., migration in birds, flowering and leaf-fall in plants, particularly as these phenomena are influenced by locality factors.

Physiographic Surface - A land surface created by geological processes of intrusion, deposition, erosion, or structural movement.

Pictographs - Prehistoric rock drawings.

PIT - An abbreviation for the Public Involvement Team.

Planned Ignitions - A fire started by deliberate management action.

Planning Area - The area of National Forest land covered by a Regional Guide or Forest Plan.

Planning Corridor - A general broad linear area of land used to evaluate where a specific right-of-way could be placed.

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

Planning Questions - A major policy question of long-range significance, derived from the public issues and management concerns, to be decided when selecting among alternative Forest Plans.

Planning Records - A system that records decisions and activities which result from the process of developing a Forest Plan, revision, or significant amendment.

PNV - An abbreviation of present net value.

Pole/sapling - A Forest successional stage in which trees between five and seven inch diameter are the dominant vegetation.

Pole Timber - Live trees of at least five inches in diameter at breast height, but smaller than the minimum utilization standard for sawtimber.

Policy - A guiding principle which is based on a specific decision or set of decisions.

Practices - Those management activities that are proposed or expected to occur.

PRC - An abbreviation for Primary Resource Contact.

Precambrian - All rocks formed before Cambrian time are now called Precambrian in Canada and by many Geologists in the U.S. Early Precambrian era and Late Precambrian era may be substituted for Archean and Proterozoic eras.

Precommercial Thinning - The practice of removing some of the trees less than merchantable size from a stand so that the remaining trees will grow faster.

Predator - One that preys, destroys, or devours--usually an animal that lives by preying on other animals.

Prescribed Burning - The intentional application of fire to wildland fuels in either their natural or modified state under such conditions as allow the fire to be confined to a predetermined area and at the same time to produce the intensity of heat and rate of spread required to further certain planned objectives of silviculture, wildlife management, etc.

Prescribed Fire - A wildland fire burning under specified conditions which will accomplish planned objectives. The fire may result from either planned or unplanned ignitions. Plans for use of unplanned ignitions for this purpose must be approved by the Regional Forester.

Prescription - A predesignated set of criteria established for the use of prescribed fire to accomplish specific land and resource management objectives. See "Management prescription."

Present Net Value (PNV) - The difference between the discounted benefits and the discounted costs over a given time period.

Preservation - A visual quality objective that allows for only ecological changes.

Presuppression - Activities in advance of fire occurrence to assure effective suppression action.

Primary Resource Contact - A member of a resource discipline who is designated as the main Forest contact for their specialty regarding the Forest Plan.

Primitive Recreation - Those recreation activities which occur in areas characterized by an essentially unmodified natural environment of fairly large size.

Primitive Roads - Roads constructed with no regard for grade control or designed drainage, sometimes by merely repeatedly driving over an area. These roads are single lane, usually with native surfacing and sometimes passable with 4-wheel-drive vehicles only, especially in wet weather.

Production Potential - The capability of the land or water to produce a given resource.

Productive Forest Lands - Forest lands that are capable of producing crops of industrial wood and have not been reserved or deferred.

Program - When capitalized, the Renewable Resource Program required by the RPA. Generally, sets of activities or projects with specific objectives, defined in terms of specific results and responsibilities for accomplishment.

Program Budget - The fiscal planning document for estimating short and long-range dollar needs by program area.

Program Development and Budgeting - The process by which activities for the Forest are proposed and funded.

Programmed Harvest - The part of the potential yield that is scheduled for harvesting. It is based on current demand, funding, and multiple use considerations.

Project Administrative Site - A site with facilities such as guard stations, project work cabins, and other facilities primarily existing for project purposes.

Project Design - The process of developing specific information related to location, timing, activities, accountability, and control that result in the achievement of an objective or desired future condition.

Projects - Work schedule prescribed for a project area to accomplish management prescriptions. Projects can be for operation maintenance and protection (OMP) or for investment purposes. OMP projects are for ongoing work and are generally considered one year at a time. Investments can be of multiyear duration. A project is organized for managerial convenience, and is described by location, activities, outputs, effects, work force, dollars, time, and responsibility for execution.

Proponent Interest - An individual or organization desiring to develop and operate a winter sports site.

Proposed Action - In terms of the National Environmental Policy Act, the project, activity, or decision that a Federal agency intends to implement or undertake.

Pruning - The removal of live or dead branches from standing trees.

Public Access - Usually refers to a road or trail route over which a public agency claims a right-of-way for public use.

Public Involvement Team - Responsible for conducting public meetings, training, or providing for training public meeting facilitators, developing mailing lists, preparing public information documents and letters, and documenting public involvement actions.

Public Issue - A subject or question of widespread public interest relating to management of National Forest System.

Public Participation Activities - Meetings, conferences, seminars, workshops, tours, written comments, response to survey questionnaires, and similar activities designed and held to obtain comments from the general public and specific publics about National Forest System land management planning.

QRD - A decision aiding tool comprised of three separate parts: 1) Question analysis "Q," 2) rules "R," and, 3) data "D." Question analysis is the process of breaking a question into more detailed specific questions. Rules means the knowledge and assumptions whereby raw data is changed into information relating to the question. Once the question and rules are analyzed, then a determination can be made of the data needed to answer the question.

Quad Maps - Standard U.S. Geological Survey quadrangle maps.

Quality Management (Range) - Management of the range ecosystem where vegetation production is being maximized, soils disturbance is minimal, and animal production is high. Impacts to the environment are low.

Quartzite - A granulose metamorphic sandstone rock consisting essentially of quartz. Soils derived from this parent material.

Range - Land producing native forage for animal consumption and lands that are revegetated naturally or artificially to provide forage cover that is managed like native vegetation, which are amenable to certain range management principles or practices.

Range Allotment - An area designated for the use of a prescribed number and kind of livestock under one management plan.

Range Condition - The state of health of the range based on what it is naturally capable of producing.

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

Raptors - Bird of prey with a strong notched beak and sharp talons, such as the eagle, hawk, owl, etc.

RARE II - See Roadless Area Review and Evaluation II.

Real Dollar Value - A monetary value that compensates for the effects of inflation.

Record of Decision - A document separate from but associated with an Environmental Impact Statement that publicly and officially discloses the responsible official's decision on which alternative assessed in the Environmental Impact Statement to implement.

Recreation Capacity - The number of people that can take advantage of the recreation opportunity at any one time without substantially diminishing the quality of the experience sought after.

Recreation Experience Level - A classification (using a 1 to 5 scale) of the level of development in camp and picnic sites as to the types of recreation opportunities and modifications to the environment that can be expected.

Recreation Information Management (RIM) - The Forest Service system for recording recreation facility condition and use.

Recreation Opportunity - Availability of a real choice for a user to participate in a preferred activity within a preferred setting, in order to realize those satisfying experiences which are desired.



Recreation Opportunity Spectrum (ROS) - A method of measuring the ability of the Forest land to meet the various types of demands imposed by a variety of recreation uses.

Recreation Types - A term used to indicate the type of recreation experience sought by Forest users. They are overlapping portions of the total recreation preference spectrum that the public may express demands for.

Type I. Orientations toward using the natural, unmodified environment for the appreciation and understanding of natural phenomena; as a source of intellectual and/or physical challenges; for seeking solitude; and for aesthetic stimulations.

Type II. Orientations toward using a natural or semiprimitive environment in searching for and extraction of indigenous fish and/or game species, rocks, minerals, edible plants, etc., and for enjoyment of the physical surroundings in which such extractable objects are found.

Type III. Orientations toward using semiprimitive, lightly developed areas for relaxing in natural surroundings; as a source of tranquility and freedom from tension; and for aesthetic stimulation.

Type IV. Orientations toward using moderately developed areas and the surrounding environment for intentional social interaction and group learning experiences.

Type V. Orientations toward using highly developed areas for social interactions with many other people and for pursuits which allow for the expression of learned physical abilities.

Developed Recreation - Recreation that occurs where modifications (improvements) enhance recreation opportunities and accommodate intensive recreation activities in a defined area. Includes some Type III, and all of Types IV and V.

Dispersed Recreation - Recreation use that requires few, if any, improvements and may occur over a wide area. This type of recreation involves activities related to roads and trails. The activities do not necessarily take place on or adjacent to a road or trail, only in conjunction with it. Activities tend to be day-use oriented and include hunting, fishing, berry picking, off-road vehicle use, hiking, horseback riding, picnicking, camping, viewing scenery, snowmobiling, and many others. Includes Type I, Type II, and a portion of Type III.

Recreation Visitor Day (RVD) - One visitor day equals 12 hours (one person for 12 hours, or 12 people for 1 hour, or any combination thereof).

Recreational Livestock - Animals used primarily in conjunction with recreation such as horses, mules, etc.

Reforestation - The natural or artificial restocking of an area with forest trees.

Regeneration - The renewal of a tree crop, whether by natural or artificial means. Also, the young crop itself, which commonly is referred to as reproduction.

Region - For Regional planning purposes, the standard administrative Region of the Forest Service, administered by the official responsible for preparing a Regional Guide.

Regional Analysis Areas - Geographic areas within the Region that encompass several Forests or Grasslands.

Regional Forester - The official responsible for administering a single Region.

Regional Guide - The guide developed to meet the requirements of the Forest and Rangeland Renewable Resources Planning Act of 1974, as amended, that guides all natural resource management activities and establishes management standards and guidelines for the National Forest System lands of a given Region. It also disaggregates the RPA objectives assigned to the Region to the Forests within that Region.

Regulations - Generally refers to the Code of Federal Regulations, Title 36, Chapter II which covers management of the Forest Service.

Release Cutting - Frees a young stand of desirable trees not past the sapling stage from the competition of undesirable trees that threaten to suppress them. A cleaning is a form of release cutting that removes trees the same age as the young stand. A liberation cutting is a form of release that removes older larger trees that overtop a more desirable younger stand.

Removal Cut (final cut) - The removal of the last seed bearers or shelter trees after regeneration is established under a shelterwood method.

Research National Areas - An area in as near a natural condition as possible which exemplifies typical or unique vegetation and associated biotic, soil, geologic, and aquatic features. The area is set aside to preserve a representative sample of an ecological community primarily for scientific and educational purposes; commercial and general public use is not allowed.

Resident Fish - Those species of fish which do not go to sea to mature.

Residual Stand - The trees remaining standing after some event such as selection cutting.

Resource Element - A major Forest Service mission-oriented endeavor which fulfills statutory or executive requirements and comprises a collection of activities from the various operating programs required to accomplish the mission. The twelve resource elements are: Recreation, wilderness, wildlife and fish, range, timber, water-soil-air, minerals, and human and community development, lands, facilities, protection, and general administration.

Resource Management Plan - A Plan developed prior to the Forest Plan that outlines the activities and projects for a particular resource element independently of considerations for other resources. Such Plans are superseded by the Forest Plan.

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 Land and Resource Management Plan in terms of a management prescription.

Responsible Official - The Forest Service employee who has been delegated the authority to carry out a specific planning action.

Retention - See "Visual quality objectives."

Retrogressive Vegetative Succession - A reversal of the usual ecological trend toward more complex and stable plant communities.

Right-of-Way - An accurately located strip of land with defined width, point of beginning, and point of ending. It is the area within which the user has authority to conduct operations approved or granted by the landowner in an authorizing document, such as a permit, easement, lease, license, or Memorandum of Understanding (MOU).

Rill Erosion - The removal of soil by cutting of numerous small, but conspicuous, water channels or tiny rivulets by concentrated surface runoff.

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

Riparian Areas - Streams, lakes, ponds, wetlands, flood plains, and their associated aquatic and riparian ecosystems.



Riparian Ecosystems - A transition between the aquatic ecosystem and the adjacent upland terrestrial ecosystem and is identified by soil characteristics and distinctive vegetation communities that require free or unbounded water.

RO - Regional (Forest Service) Office.

Road - A general term denoting a way for purposes of travel by vehicles greater than 40 inches in width.

Forest Arterial Road - Provides service to large land areas and usually connects with public highways or other Forest arterial roads to form an integrated network of primary travel routes. The location and standard are often determined by a demand for maximum mobility and travel efficiency rather than specific resource management service. It is usually developed and operated for long-term land and resource management purposes and constant service (FSM 7710.51).

Forest Collector Road - Serves smaller land areas than a Forest arterial road and is usually connected to a Forest arterial or public highway. Collects traffic from Forest local roads and/or terminal facilities. The location and standard are influenced by both long-term multiresource service needs, as well as travel efficiency. May be operated for either constant or intermittent service, depending on land use and resource management objectives for the area served by the facility (FSM 7710.51).

Forest Local Road - Connects terminal facilities with Forest collector or Forest arterial roads, or public highways. The location and standard are usually controlled by a specific resource activity rather than travel efficiency. Forest local roads may be developed and operated for either long or short-term service (FSM 7710.51).

Road Maintenance Levels - Levels are described as follows:

Level 1 - Road normally closed to vehicle traffic.

Level 2 - Road open for limited passage of traffic but not normally suitable for passenger cars.

Level 3 - Road open for public traffic including passenger cars, but may not be smooth or comfortable.

Level 4 - Road suitable for all types of vehicles, generally smooth to travel, and dust may be controlled.

Level 5 - Road is smooth and dust free, and the surface is skid resistant if paved.

Roaded Natural - A classification of the recreation opportunity spectrum that characterizes a predominantly natural environment with evidence of moderate permanent alternate resources and resource utilization. Evidence of the sights and sounds of man is moderate, but in harmony with the natural environment. Opportunities exist for both social interaction and moderate isolation from sights and sounds of man.

Roadless Area Review and Evaluation II (RARE II) - The national inventory of roadless and undeveloped areas within the National Forest and Grasslands. This refers to the second such assessment, which was documented in the Final Environmental Impact Statement of the Roadless Area Review and Evaluation, January 1979.

Rotation - The planned number of years between the formation or regeneration of a crop or stand and its final cutting at a specified stage of maturity.

Roundwood - Timber and fuelwood prepared in the round state--from felled trees to material trimmed, barked, and crosscut (logs, transmission poles, etc.).

RPA - An abbreviation for the Forest and Rangeland Renewable Resources Planning Act of 1974. Also refers to the National Assessment and Recommended Program developed to fulfill the requirements of the Act. The most recent recommended Program was done in 1980.

RPA Program - The Forest and Rangeland Renewable Resources Planning Act of 1974. Also refers to the National Assessment and Recommended Program developed to fulfill the requirements of the Act. The most recent recommended program was done in 1980.

RVD's - An abbreviation of Recreation Visitor Days.

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

Saleables See common variety minerals.

Salvage - The harvesting of trees that are dead, dying, or deteriorating; e.g., because overmature or materially damaged by fire, wind, insects, fungi, or other injurious agencies, before their timber becomes worthless.

Sanitation Cutting - The removal of dead, damaged, or susceptible trees, essentially to prevent the spread of pests or pathogens and so promote Forest hygiene.

Sawtimber - Live trees that equal or exceed the minimum utilization standard for sawtimber.

Scenic Easement - An interest in the land of another which allows the easement holder specified uses or rights without actual ownership of the land. In this case, control of the use of land adjacent to public highways, parks, and rivers. It may provide something attractive to look at within the easement area, an open area to look through to see something attractive beyond the easement itself, or a screen to block out an unsightly view beyond the easement area.

Scoping Process - A continuing process throughout the environment analysis for planning and management activities. It may involve a series of meetings, telephone conversations, or written comments from different interested groups.

Second Growth - Forest growth that has become established after some interference with the previous Forest crop; e.g., cutting, serious fire, or insect attack.

Seed Tree Cutting - Removal in one cut of the mature timber crop from an area, except for a small number of seed bearers left singly or in small groups.

Seedling/Sapling - Live trees less than five inches in diameter at breast height.

Sedimentary - Rocks which have been formed from deposits, whether from fragments of other rock transported from their sources and deposited by water, or by precipitation from solution. Soils formed from this material.

Selected Alternative - The alternative recommended for implementation as the Forest Plan based on the evaluation completed in the planning process.

Selection - See "Group selection" and "Individual (single) tree selection."

Semiprimitive Motorized - A classification of the recreation opportunity spectrum characterized by a predominantly unmodified natural environment in a location that provides good to moderate isolation from sights and sounds of man except for facilities/travel routes sufficient to support motorized recreational travel opportunities which present at least moderate challenge, risk, and a high degree of skill testing.

Semiprimitive Nonmotorized - A classification of the recreation opportunity spectrum characterized by a predominantly unmodified natural environment of a size and location that provides a good to moderate opportunity for isolation from sights and sounds of man. The area is large enough to permit overnight foot travel within the area, and presents opportunity for interaction with the natural environment with moderate challenge, risk, and use of a high degree of outdoor skills.

Sensitive Species - Those plant or animal species which are susceptible or vulnerable to activity impacts or habitat alterations.

Sensitivity Level - A particular degree of measure of viewer interest in scenic qualities of the landscape. Three sensitivity levels are employed, each identifying a different level of user concern for the visual environment.

Level 1 - Highest sensitivity

Level 2 - Average sensitivity

Level 3 - Lowest sensitivity

Seral Condition - The unique characteristics of a biotic community which is a developmental, transitory stage in an orderly ecologic succession involving changes in species, structure, and community processes with time.

Serotinous Cones - Cones on which the scales are sealed with resin, generally requiring heat of at least 113 °F. (45°C.) to melt the resin and thus allow the scales to flex and spread apart. Cones do not open at maturity; often referred to as closed cones.

Sheet Erosion - The removal of a fairly uniform layer of soil from the land surface by runoff water or wind.

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.

Shrub/Seedling - A Forest successional stage in which shrubs and seedling trees are the dominant vegetation.

Sight Distance - The distance at which 90 percent or more of a deer or elk is hidden from an observer. Hiding cover exists when 90 percent or more of a standing deer or elk is hidden at a distance of 200 feet or less.

Silvicultural Examination - The process used to gather the detailed in-place field data needed to determine management opportunities and direction for the timber resource within a small subdivision of a Forest area such as a stand.

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

Site Index - A numerical evaluation of the quality of land for plant productivity.

Site Preparation - A general term for removing unwanted vegetation, slash, roots and stones from a site before reforestation.

Site Productivity - Production capability of specific areas of land.

Size Class - For the purposes of Forest planning, size class refers to the three intervals of tree stem diameter used for classification of timber in the Forest Plan data base.

- Less than 5-inch diameter = seedling/sapling.
- Five to 7-inch diameter = pole timber.
- Greater than 7-inch diameter = sawtimber.

Skidding - A loose term for hauling loads by sliding, not on wheels, as developed originally from stump to roadside, deck, skidway, or other landing.

Slash - The residue left on the ground after timber cutting and/or accumulating there as a result of storm, fire, or other damage. It includes unused logs, uprooted stumps, broken or uprooted stems, branches, twigs, leaves, bark, and chips.

Slope Slump - A slide or earthflow of a soil mass.

Small Game - Birds and small mammals normally hunted or trapped.

Snag - A nonliving standing tree. The interior of the snag may be sound or rotted.

SO - (Forest)' Supervisor's Office.

Social Disruption - The disruption or breaking up of people's lives, especially in their dealings with each other.

Society of American Foresters (SAF) Forest and Cover Types - A forest type is a descriptive term used to group stands of similar character in regards to composition and development due to given ecological factors, by which they may be differentiated from other groups of stands. The term suggests repetition of the same character under similar conditions. A cover type is a forest type now occupying the ground, no implication being conveyed as to whether it is temporary or permanent.

Soil Compaction - Reduction of soil volume which results in alteration of soil, chemical, and physical properties.



Soil Productivity - The capacity of a soil to produce a specific crop such as fiber, forage, etc., 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; such examinations are at differing "orders" and interpretation according to their adaptability for various crops, grasses, and trees; there are five classed orders of surveys, with Order 1 being the highest intensity through Order 5 (lowest intensity).

Sound Wood - Timber that is free from defect, damage, or decay; i.e., in solid, whole, good condition.

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.

Spring Breakup - The time of year when roads break up due to melting frost and ice, generally from the first of March to the middle of April.

Stand - An aggregation of trees or other growth occupying a specific area and sufficiently uniform in composition (species), age arrangement, and condition as to be distinguishable from the Forest or other growth on adjoining areas.

Stand Examination Surveys - Procedures consisting of seven types of surveys used to collect data on Forest stands. Types 1 through 4 are conducted by using intensive specified standard procedures. Types 5 through 7 are less intensive examinations consisting of modifications to procedures used in Type 1 through 4 surveys.

Stand Size Class - A classification of forest land based on the predominant size of trees present; that is, sawtimber, pole-timber, seedling-sapling.

Standard - A principle requiring a specific level of attainment, a rule to measure against.

Standard, Manage To (Recreation) - Management of developed and dispersed facilities and areas to provide optimum maintenance. See Less Than Standard, Manage To.

State Air Quality Regulations - The legal base for control of air pollution sources in that state. Prescribed burning is generally covered under these regulations.

State Implementation Plan - A State Plan that covers implementation, maintenance, and enforcement of primary and secondary standards in each air quality control region, pursuant to Section 110 of the Clean Air Act.

Strategic Minerals - Those minerals of which the U.S. imports 50 percent or more from foreign sources (based on 1978 U.S. Bureau of Mines figures).

Stratification - Dividing a Forest into smaller areas of like characteristics for modeling purposes.

Stratigraphic Time - Term applied to rock units with boundaries based on geologic time.

Stratigraphy - That branch of geology which treats the formation, composition, sequence, and correlation of the layered rocks as parts of the earth's crust.

Stream - A water course having a distinct natural bed and banks; a permanent source which provides water at least periodically; and at least periodic or seasonal flows at times when other recognized streams in the same area are flowing.

Substrate - Material underlying something.

Successional Stage - A stage or recognizable condition of a plant community that 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; old growth.

Suitability - The appropriateness of applying certain resource management practices to a particular area of land, as determined by an analysis of the economic and environmental consequences and the alternative uses foregone. A unit of land may be suitable for a variety of individual or combined management practices. See also "Timber classification."

Suitability Analysis - Process of identifying lands to be managed for timber production. Stage I identifies the biologically capable, administratively available, and technically suitable lands. Stage II consists of an economic analysis of costs and benefits of timber management on the lands identified in Stage I. Stage III provides the final allocation of suitable lands based on Forest objectives and economic efficiency. Stages II and III are completed with the FORPLAN model.

Suitable Forest Land - Lands allocated to timber management as a result of the three-stage suitability analysis.

Supply - A schedule of the quantity of a product or Forest output that will be produced at various prices.

Supply Potential - The output production possible from the available resources.

Suppression - An act extinguishing or confining a fire.



Surface Resources - Renewable resources located on the earth's surface in contrast to ground water and mineral resources located below the earth's surface.

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 of the productivity of the land.

T & E - An abbreviation for Threatened and Endangered species.

Targets - A quantifiable output. Assignments made to the Forest by the Regional Forester.

Technically Suitable Forest Land - Land for which technology is available that will ensure timber production without irreversible resource damage to soils, productivity, or watershed conditions. There is reasonable assurance that such lands can be adequately restocked as provided in 36 CFR 219.13 (h)(3).

Temporary Road - A road that will be physically obliterated and seeded after its primary use is completed; i.e., spur road for logging. It will never be used again.

Thermal Cover - Cover used by animals to ameliorate effects of weather; for elk, a stand of coniferous trees 40 feet or taller with an average crown closure of 70 percent or more.

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.

Thousand Board Measure (MBF) - A symbol to indicate 1000 board feet of wood fiber volume, either in log form or after conversion into lumber.

Threatened Species - Those plant or animal species likely to become endangered species throughout all or a significant portion of their range within the foreseeable future.

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 analyses (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.

Timber Base - The lands within the Forest capable, available, and suitable for timber production.

Timber Classification - Forested land is classified under each of the land management alternatives according to how it relates to the management of the timber resource. The following are definitions of timber classifications used for this purpose:

1. Nonforest Land - Lands never having or incapable of having greater than 10 percent of the area occupied by forest trees and lands formerly forested and currently developed for nonforest use.
2. Forest Land - Land at least 10 percent occupied by forest trees of any size or formerly having had such tree cover and not currently developed for nonforest use. Lands developed for nonforest use include areas for crops, improved pasture, residential or administrative areas, improved roads of any width and adjoining road clearing and powerline clearing of any width. The term occupancy when used to define forest land will be measured by canopy cover of live forest trees on one acre. Unimproved roads, trails, streams, and clearings in forest areas are classified as forest if they are less than 120 feet in width.
3. Suitable Forest Land - Land that is managed for timber production on a regulated basis.
4. Unsuitable Forest Land (not suited) - Forest land that is not managed for timber production because: (1) the land has been withdrawn by Congress, Secretary, or Chief; (2) technology is not available to prevent irreversible damage to soils, productivity, or watershed conditions; (3) there is no reasonable assurance that lands can be adequately restocked within five years after final harvest based on existing technology and knowledge; (4) there is at present, a lack of adequate information to responses to timber management activities; or (5) timber management is inconsistent with or not cost-efficient in meeting the management requirements and multiple-use objectives specified in the Forest Plan.
5. Tentatively Suitable (commercial forest land) - Forest land which is producing or is capable of producing crops of industrial wood and (1) has not been withdrawn by Congress, the Secretary, or Chief; (2) existing technology and knowledge is available to ensure timber production without irreversible damage to soils, productivity, or watershed conditions; and (3) existing technology and knowledge provides reasonable assurance that adequate restocking can be attained within five years after final harvesting.

Timber Harvest Schedule - See "Sale Schedule."

Timber Production - The purposeful growing, tending, harvesting, and regeneration of regulated crops of trees to be cut into logs, bolts, or other round sections for industrial or consumer use. For purposes of this document, the term "timber production" does not include production of fuelwood or harvest of timber from unsuitable lands.

Timber Stand Improvement (TSI) - Measures such as thinning, pruning, release cutting, prescribed fire, girdling, weeding, or poisoning of unwanted trees aimed at improving growing condition of the remaining trees.

Tractor Logging - Any logging method which uses a tractor as the motive power for transporting logs from the stumps to a collecting point—whether by dragging or carrying the logs.

Tradeoff Evaluation Process (TEP) - A process whereby factors, issues, elements, etc., are evaluated with regard to the tradeoffs that would occur.

Trail Maintenance Level - One of the categories outlined in the Management Information Handbook describing the type and intensity of maintenance for trails.

Transitory Range - Land that is suitable for grazing use of a nonenduring nature over a period of time. 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.

Travel Management - The administrative decisions on the location and timing of road and trail closures.

Treatment Area - The site-specific location of a resource improvement activity.

Tree Opening - An opening in the forest cover created by the application of even-aged silvicultural practices.

Type Conversion - The conversion of the dominant vegetation in an area from forested to nonforested or from one tree species to another.

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 action that results 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:

Individual tree selection cutting. The removal of selected trees of all size classes on an individual basis.

Group selection cutting. The removal of selected trees of all size classes in groups of a fraction or an acre up to two or three acres in size.

Unpatented Mining Claim - See mining claim.

Unplanned Ignition - A fire started at random by either natural or human cause, or a deliberate incendiary fire.

Unregulated Harvest - This harvest is not charge against the allowable sale quantity, and includes occasional volumes removed that were not recognized in calculations of the allowable sale quantity, such as cull or dead material and noncommercial species and products. It also includes all volume removed from nonsuitable areas. Harvests from nonsuitable areas will be programmed as needed for objectives such as research on experimental Forests, to meet multiple use objectives other than timber production, and for improvement of administrative sites.

Unsuitable Lands - See "Timber classification."

Utilization Standards - Standards guiding the projection of timber yields and the use and removal of timber. The standards are described in terms of minimum diameter at breast height, minimum length, and percent soundness of the wood, as appropriate.

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

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

Vertical Diversity - The diversity in a stand that results from the complexity of the above-ground structure of the vegetation; the more tiers of vegetation the more complex the stand.

Viable Populations - A number of individuals of a species sufficient to ensure the long-term existence of the species innatural self-sustaining populations adequately distributed throughout their region.

VIS Site - Visitor Information Service. Site which provides interpretative information, (directional, historical, statistical) located at Forest historical sites, overlook sites, or special interest area.

Visitor Day - The use of an area for a total of 12 person hours by one or more people, either continuously or over several visits.

Visitor Information Service (VIS) - Activities which interpret for visitors, in layman's language, Forest management, protection, utilization, and research. It also includes interpreting the local botany, geology, ecology, zoology, history, and archeology.

Visual Absorption Capability - The ability of the landscape to conceal evidence of human modifications. Rated as high, moderate, and low.

Visual Quality Objective (VQO) - Categories of acceptable landscape alternation measured in degrees of deviation from the natural appearing landscape.

Preservation (P) - Ecological change only here.

Retention (R) - Human activities should not be evident to the casual Forest visitor.

Partial Retention (PR) - Human activities should remain visually subordinate to the characteristic landscape.

Modification (M) - 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 middleground.

Maximum Modification (MM) - Human activity may dominate the characteristic landscape, but should appear as a natural occurrence when viewed as background.

Enhancement - A short-term management alternative which is done with the express purpose of increasing positive visual variety where little variety now exists.



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.

Volcanics - General collective term for extrusive igneous and pyroclastic material and rocks. Soils which derive from this parent material.

VQO - An abbreviation of Visual Quality Objective.

Water Rights - Rights to divert and use water or to use it in place.

Water Yield - The measured output of the Forest's streams.

Water Yield Increase - Additional water released to the Forest streams as a result of Forest management activities.

Watershed - The entire area that contributes water to a drainage system or stream.

Wet Areas - Often referred to as "moist sites," they are very important components of elk summer range. These sites, often occurring at the heads of drainages, may be wet sedge meadows, bogs, or seeps. Sites near water are important because the forage they produce are highly nutritious and heavily utilized by elk.

Wetlands - Areas that are inundated by surface 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 seasonably saturated soil conditions for growth and reproduction.

Wild and Scenic River - A Congressionally designated river which shall be preserved in a natural and free-flowing condition.

Wilderness - Areas designated by congressional action under the 1964 Wilderness Act. Wilderness is defined as undeveloped Federal land retaining its primeval character and influence without permanent improvements or human habitation. Wilderness areas 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 man's activity substantially unnoticeable; have outstanding opportunities for solitude or a primitive and unconfined type of recreation; include at least 5000 acres or is 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.

Under the current management situation, roadless areas will be handled in the Forest Plan as follows:

1. Nonwilderness Roadless Areas - On February 1, 1983, the Secretary of Agriculture made a decision to re-evaluate RARE II roadless areas as a result of the Ninth Circuit Court of Appeals decision to California vs. Block. Pending any legislative changes, the re-evaluation will be conducted during the Forest land and resource management planning process and will include, in addition to further planning areas, roadless areas recommended for wilderness in RARE II and areas that were administratively designated for nonwilderness uses. Activities in nonwilderness areas will continue under existing Plans, pending completion of the Forest Plans.
2. Wilderness and Primitive Areas - These areas will be managed to protect their wilderness characteristics as provided for through the Wilderness Act of 1964 and subsequent designating legislation.
3. Recommended Wilderness - These areas have already been recommended as suitable for inclusion as wilderness areas through the RARE II process but will be re-evaluated in Forest planning. These areas may be considered for designation by Congress prior to completion of the Forest Plans.
4. Further Planning Areas - These areas will be considered for wilderness or nonwilderness during the development of Forest Land and Resource Management Plans. Decisions on the suitability or unsuitability of the areas for wilderness designation will be made in the Forest Plan. Suitable areas will be recommended to Congress for inclusion in the National Wilderness Preservation System. (The matter goes before Congress for final decision.) If not found suitable, Congress will be notified by letter of a decision of unsuitability in the Forest Plan. A 90-day waiting period is necessary while Congress is in session before a decision of unsuitability can be implemented.

Interim management direction for recommended wilderness and further planning areas protects their wilderness characteristics until the final decisions are made. The areas are not available for timber harvest, road construction, or other activities that reduce wilderness potential. Entry into the areas for the exploration, development, and production of minerals is permitted under the 1872 mining laws. Mineral leasing in further planning areas includes a stipulation that requires a sequential review and approval of operations. This requires confirmation that succeeding operations are warranted by information collected in the preceding stage.



Wilderness Planning Team - A four-person Team assigned to the Salmon National Forest to write the comprehensive Wilderness Plan mandated by Congress in the Central Idaho Wilderness Act of 1980.

Wildfire - Any wildland fire that is not a prescribed fire.

Wildlife Habitat Diversity - The distribution and abundance of different plant and animal communities and species within a specific area.

Wildlife Habitat Effectiveness - The character of locations where wildlife are not disturbed by human activities.

Window - A critical segment of terrain through which right-of-way could pass in traversing from point of origin to destination.

Winter Range - See big game winter range.

Withdrawal - An order removing specific land areas from availability for certain uses.

Wood Fiber Production - The growing, tending, harvesting, and regeneration of harvestable trees.

Work Center - A facility where crews assemble and are directed toward their various work assignments. A work center can be located at an administrative site. A work center normally will include storage and warehousing facilities and may include crew housing.

WPT - An abbreviation for the Wilderness Planning Team.

Year-round Economies - Economies based on employees working year-round as opposed to seasonal employment.

Zone of Influence (ZOI) - The area influenced by Forest Service management activities.