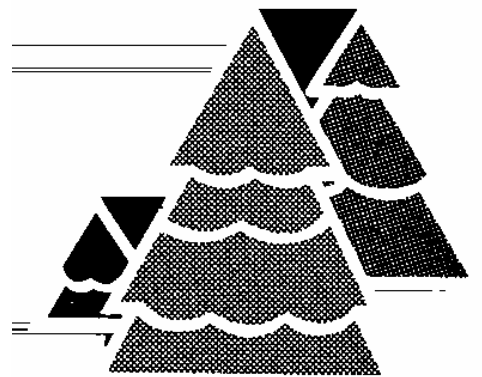


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Abbreviations Used In The Documents

AASQ — Average Allowable Sale Quantity

AMS — Analysis of the Management Situation

AQRV — Air Quality Related Value

ASO — Annual Allowable Sale Quantity

BD — Brush Disposal

BLM — Bureau of Land Management

BMP — Best Management Practices

BSS — Base Sale Schedule

CEO — Council on Environmental Quality

CF — Cubic Foot

CFL — Commercial Forest Land

CFR — Code of Federal Regulations

CMAI — Culmination of Mean Annual Increment

DBH — Diameter at Breast Height

DEIS — Draft Environmental Impact Statement

DNR — Department of Natural Resources. Washington State

DOE — Department of Ecology. Washington State

EIS — Environmental Impact Statement

EPA — Environmental Protection Agency

EVC — Existing Visual Condition

FEIS — Final Environmental Impact Statement

FERC — Federal Energy Regulatory Commission

FS — Forest Service

FSH — Forest Service Handbook

FSM — Forest Service Manual

FVC — Future Visual Condition

FWS — Fish and Wildlife Service, U.S. Department of the Interior

Plan - Glossary

ICO — Issues, Concerns, Opportunities

ICOR — Interagency Committee for Outdoor Recreation, Washington State

IPT — Interdisciplinary Planning Team

KV — Knutsen-Vandenberg Fund

LAC — Limits of Acceptable Change

LTSYC — Long-Term Sustained Yield Capacity

MAI — Mean Annual Increment

MBNRA — Mt. Baker National Recreation Area

MBS — Mt. Baker-Snoqualmie National Forest

MIS — Management Indicator Species

MSF — Thousand Board Feet

MMBF — Million Board Feet

MCF — Thousand Cubic Feet

MMCF — Million Cubic Feet

MR — Management Requirement

MSF — Mt. Baker-Snoqualmie National Forest

NDY — Non Declining Yield

NEPA — National Environmental Policy Act

NP — National Forest

NFMA — National Forest Management Act

NFS — National Forest System

NPB — Net Public Benefit

PAOT — Persons-At-One-Time

PSD — Prevention of Significant Deterioration

OFM — Office of Financial Management, Washington State

ORV — Off-Road Vehicle

PCT — Precommercial Thin

PNV — Present Net Value

PNW — Pacific Northwest Region. USDA Forest Service

PNW — Present Net Worth

RARE II — Roadless Area Review and Evaluation

RIM — Recreation Information Management

RM — Roaded Modified

RN — Roaded Natural

RNA — Research Natural Area

ROS — Recreation Opportunity Spectrum

RPA — Forest and Rangeland Renewable Resources Planning Act

RVD — Recreation Visitor Day

SCORP — State Comprehensive Outdoor Recreation Plan

SEIS — Draft Supplemental to the Environmental Impact Statement for an Amendment to the Pacific Northwest Regional Guide — Spotted Owl Guidelines, 1986

SMU — Streamside Management Unit

SOHA — Spotted Owl Habitat Area

SPM — Semi-Primitive Motorized

SPNM — Semi-Primitive Nonmotorized

TSPQ — Timber Sale Program Quantity

TRI — Total Resource Inventory

TSE — Timber Stand Examination

TSI — Timber Stand Improvement

USDA — United States Department of Agriculture

USDI — United States Department of Interior

USFWS — United States Fish and Wildlife Service

VAC — Visual Absorption Capacity

VQL — Visual Quality Level

VQO — Visual Quality Objective

WFUD — Wildlife Fish User Day

Plan - Glossary

WMU — Wetland Management Unit

WROS — Wilderness Recreation Opportunity Spectrum

Acquired Lands — Lands added to the National Forest system by purchase, transfer, or donation under authority of the Weeks Law or related acts. Also, lands obtained by the Forest Service by exchange for other acquired lands.

Acre Equivalent — Used to adjust actual acres of habitat improvement or improvement structures to reflect overall habitat benefits derived. It reflects the zone of influence of the habitat improvement for the target species. For example, a single water development for upland game birds has an acre equivalent of 160, whereas a single water structure for big game has a value of 640 because it has a larger zone of influence for the more mobile big game animals.

Acre-foot — A measure of water or sediment volume, equal to the amount which would cover an area of one acre to a depth of one foot (i.e. 43,560 cubic feet or 325,851 gallons).

Activity — Actions, measures, or treatments that are undertaken that directly or indirectly produce, enhance, or maintain forest and rangeland outputs or achieve administrative or environmental quality objectives. An activity can generate multiple outputs. Forest Service activity definitions, codes, and units of measure are contained in the Management Information Handbook (FSM 1309.11).

Administrative Unit — An area under the administration of one line officer, such as a District Ranger, Forest Supervisor, or Regional Forester.

Air Quality Related Value (AQRV) — Any physical, chemical, or biological component of an ecosystem that can be affected by changes in air pollutant levels. As an example: visual range as measured from a vista may be shortened by the presence of fine particulates in the air. Similarly a threatened or endangered plant species may be sensitive to sulphur dioxide levels.

Airshed — A geographical area that, because of topography, meteorology, and/or climate, shares the same air.

Age Class — An interval, usually 10 to 20 years, into which the age ranges of vegetation are divided for classification or use.

Allocation Zone — Geographic subdivisions of the Forest delineated for the purpose of controlling land allocations, so the FORPLAN Model could select only from a set of spatially feasible land allocations and harvest schedules. In addition, outputs and costs portrayed by zones would be more meaningful than portrayed by Forest-wide analysis areas.

Allowable Sale Quantity (ASQ) — The quantity of timber that may be sold from the area of suitable land covered by the Forest Plan for a time period specified by the plan. This quantity is usually expressed on an annual basis as the "Average Annual Allowable Sale Quantity." For timber resource planning purposes, the allowable sale quantity applies to each decade over the planning horizon and includes only chargeable volume. Consistent with the definition of timber production, fuelwood and other non-industrial wood shall not be included in the allowable sale quantity.

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

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

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

Plan - Glossary

Analysis Area — A grouping of homogeneous land areas, formed from the land and resource inventory data comprising the data base. Similarities are in terms of common capabilities to produce resources and susceptibility to impacts. Analysis areas need not be contiguous areas of land.

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 one mature (1,000 lb.) cow or the equivalent for 1 month, based on an average of 26 lbs. of dry forage per day.

Aquatic Ecosystems — Stream channels, lakes, marshes or ponds, and the plant and animal communities they support.

Aquifer — An underground geological formation or structure that contains water in sufficient quantity to supply needs for water development.

Arterial Roads — See "Road, Arterial."

Average Annual Allowable Sale Quantity (AAASQ) — See "Allowable Sale Quantity."

Background — The viable terrain beyond the foreground and middleground where individual trees are not visible, but are blended into the total fabric of the stand. Includes the view beyond 3-5 miles from the observer and as far as the eye can see. (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 Sale Schedule (BSS) — 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 non-declining flow.

Bedload — The sediment that moves by sliding, rolling, or bounding on or very near the streambed; sediment moved mainly by tractive or gravitational forces or both but at velocities less than the surrounding flow.

Benchmark — 1) The analytical basis from which the alternatives were developed. The use of assessed land capability as a basis from which to estimate the effects of alternative patterns of management on the land. 2) 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/Cost Ratio — The ratio obtained by dividing the anticipated benefits of a project by its anticipated costs (or realized benefits by realized costs) to obtain a measure of expected (or realized) benefits per unit of cost — a common exercise in cost-benefit analysis which gives a measure of economic efficiency.

Best Management Practices (WAP's) — A practice or combination of practices that is determined by a State (or designated area-wide planning agency) after problem assessment, examination of alternative practices, and appropriate public participation, to be the most effective, practicable (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 (Federal Register, Volume 40, No. 230 dated 11/28/75).

Big Game — Those species of large mammals normally managed for sport hunting.

Big Game Summer Range — A range, usually at higher elevation, used by deer and elk during the summer. Summer ranges are usually much more extensive than winter ranges.

Big Game Winter Range — A range, usually at lower elevation, used by migratory deer and elk during the winter months; usually more clearly defined and smaller than summer ranges.

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

Biological Potential — The maximum production of a selected organism that can be attained under optimum management.

Biomass — The total quantity at a given time of living organisms of one or more species per unit of space (species biomass), or of all the species in a biotic community.

Board Foot — The amount of timber equivalent to a piece of wood one foot square and one inch thick, being the unit in board foot measure.

Board Foot/Cubic Foot Ratio — A ratio expressing the number of board feet in a cubic foot of timber. Varies with tree species, diameter, height, and form factors

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

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

Brush — A growth of shrubs or small trees, usually of a type undesirable to livestock or timber management.

Brush Disposal (BD) — A term commonly used to refer to disposal of slash. See “Slash.” “Broadcast Burn.” and “Residue Utilization.”

Bureau of Land Management (BLM) — An agency within the Department of the Interior, with land management responsibility for the Public Domain lands.

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 given levels of management intensity. Capability depends upon current conditions and site conditions such as climate, slope, landform, soils, and geology, as well as on the application of management practices, such as silviculture or protection from fire, insects, and disease.

Capital Investment — An input that increases the value of natural or manmade resources (assets) needed to maintain or increase the flow of outputs in the future. Benefits resulting from capital investments are normally recouped in excess of 1 year.

Plan - Glossary

Carrying Capacity — 1) 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 2) In recreation management, the level of recreational use that a site can provide without deterioration of the quality of the recreation experience of the resource.

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

Cedar — Areas that have been sources of various cedar products, or are at least identified as significant stands of cedar. Cedar is used in everything from smokehouse construction to spirit dancer costumes to basketry and other utilitarian items. Of all forest products it may be the most significant to the Indians of today, although it cannot survive without a total appropriate environment, most of which was used by the Indians in the past.

Cemeteries & Archaeological Sites — Villages, camps, and burial areas (not in most instances known to be cemeteries). Other sites are ethnographically and/or historically known cemeteries. Some are maintained and still used, others are not.

Ceremonial flora — Locations known to contain certain plants that have ritual or healing properties. Some areas so designated are large and may contain several such plant species, others are small and may possess only a few. Often areas containing specific flora are considered as ceremonially, ritually, and/or religiously powerful.

Channel or Stream Scour — Erosion of the channel bottom caused by high flows of water, loss of channel stability or debris torrents.

Chargeable Volume — All volume that is included in the growth and yield projections for the selected management prescriptions used to arrive at the allowable sale quantity, based on Regional utilization standards.

CHUNK Study — An economic-efficiency study of the developed campgrounds on the Forest, completed in 1984. Refer to Chapter III, DEIS, Recreation.

Class I Stream — Perennial or intermittent streams (or segments thereof) that have one or more of the following characteristics: provide a direct source of water for domestic use; are used by large numbers of fish for spawning, rearing, and/or migration; and/or are major contributors to the quantity of water in a Class I stream. See "SMU."

Class II Stream — Perennial or intermittent streams (or segments thereof) that have one or more of the following characteristics, are used by moderate though significant numbers of fish for spawning, rearing and/or migration, and/or flow enough water to be moderate or not clearly identifiable contributors to the quantity of water in a Class I stream, or are major contributors to a Class II stream. See "SMU."

Class III Stream — All other perennial streams or segments thereof not meeting higher class criteria. See “SMU.”

Deeply Incised — A stream channel with perennial stream flow, steep deep streambanks, and unstable sideslopes that can generate slumps and slides resulting in debris torrents. Class III channels incised more than 10 feet and having one or more unstable soil types qualifies as a deeply incised Class III stream. On this Forest 70% of the Class III streams are deeply incised; they represent 66% of the total Forest stream miles.

Lightly Incised — Class III channels incised less than 10 feet, and in some cases, possessing unstable soil types, qualifies as a lightly incised Class III stream. For this Forest, 30% of the Class III streams are lightly incised; this represents 27% of the total Forest stream miles.

Class IV Stream — All other intermittent streams not meeting higher class criteria. See “SMU.”

Clearcutting — A silvicultural system in which all trees on an area are harvested in one cut for the purpose of regenerating a new, even-aged stand. The area harvested may be a patch, strip, or stand large enough to be mapped or recorded as a separate class in planning for sustained yield.

Climax — The culminating stage in plant succession for a given site where the vegetation has reached a highly stable condition.

Climax Species — Those species that dominate a climax stand in either numbers per unit area or biomass.

Code of Federal Regulations (CFR) — A codification of the general and permanent rules published in the Federal Register by the Executive departments and agencies of the Federal Government.

Collector Reads — See “Road, Collector.”

Commercial Forest Land (CFL) — See “Timber Resource Land Suitability Classification.”

Commercial Thinning — Any type of tree thinning that produces merchantable material at least equal in value to the direct costs of harvesting.

Commodity — A transportable resource product with commercial value; all resource products that are articles of commerce.

Compaction — The packing together of soil particles by forces exerted at the soil surface, resulting in increased soil density.

Concern — A point, matter, or question raised by management and/or the public that must be addressed in the planning process.

Concession — A commercial public service enterprise which operates on National Forest land under a “Special Use Permit” for the purpose of providing goods and services to the public.

Condition Class — A descriptive grouping into 10 classes of the existing forest vegetation based on age, tree size, maturity, species mix, and accessibility by road. Condition class is an important component of the Forest Model structure. See “Forest Model” and Appendix B.

Congressionally Classified and Designated Areas — Areas that require congressional enactment for their establishment, such as National Wilderness Areas, National Wild and Scenic Rivers, and National Recreation Areas.

Plan - Glossary

Connecting Habitat — Areas which serve as travel corridors or habitat connections, provide for the dispersal and interaction of indicator species, and avoid the isolation of habitat into geographic islands. These areas provide species access across and/or along drainages and elevation gradients (ridgeline to valley floor). Connecting habitat can be provided in several ways:

1. Utilize natural land forms, such as riparian areas along creek drainages, or the areas adjacent to avalanche chutes, where possible.
2. Maintain areas in blocks of land that generally are one or more logical harvest units in size. This will provide the option of rotating the designation of connecting habitat to adjacent areas, as the adjacent harvested areas mature or develop the desired habitat structure.

Constraint — A confinement or restriction on the range of permissible choices.

Consumptive Use — A use of resources that permanently reduces the supply, such as mining. (See also Non-consumptive Use.)

Core Area — (As related to a Spotted Owl Habitat Area) An area encompassing at least 300 contiguous acres of old growth suitable for nesting and reproduction. Centering on a reproductive site or a site of concentrated pair use where such information is available. See "Spotted Owl Habitat Area."

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

Costs:

1. Direct cost — a cost that directly contributes to the production of the primary outputs of an activity, project, or program.
2. Economic cost — total fixed and variable costs for inputs, including costs incurred by other public parties and, if appropriate, opportunity costs and cost savings.
3. Fixed cost — a cost that is committed for the time horizon of planning or the decision being considered. Fixed costs include fixed ownership requirements, fixed protection, short-term maintenance, and long-term planning and inventory costs.
4. Investment cost — a cost of creating or enhancing capital assets, including costs of administrative or common-use transport facilities and resource management investments.
5. Joint cost — a cost contributing to the production of more than one type of output.
6. Non-Forest Service cost — a cost of investment and operating activities paid by cooperators or other non-Forest Service agencies which are part of Forest Service management programs, or which contribute to the outputs included in the analysis.
7. Opportunity cost — the value of a resource's foregone net benefits in its most economically efficient alternative use.
8. Unit cost or cost per unit — total cost of production divided by the number of units produced.

Plan - Glossary

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

Cost Share — A term referring to investment sharing provided under Public Law 88-557 (18 U.S.C. 535) whereby forest development roads may be financed cooperatively with public or private agencies or persons. Investment sharing may be accomplished in several ways. Road right-of-way construction and use agreements (referred to as cost share agreements) are a common method used in this Forest where there are large areas of intermingled landownership.

Council on Environmental Quality (CEQ) — An advisory council to the President established by the National Environmental Policy Act of 1959. Reviews federal programs for their effect on the environment, conducts environmental studies, and advises the President on environmental matters. (Abstracted from NEPA.)

Cover/forage Ratio — The mixture of cover and forage areas on a unit of land, expressed as a ratio.

Created Openings — Openings in the forest created by the silvicultural practices of: shelterwood regeneration cutting at the final harvest; clearcutting; seed tree cutting; or group selection cutting.

Crop Tree — Any tree forming or selected to form, a component of the final crop. Generally a tree selected in a young stand or plantation for carrying through to maturity.

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

Cubic Foot — A unit of quantity for lumber or timber equal to a cube 1x1x1 foot.

Cull Material — Timber which does not meet the specified utilization standards (usually in a timber sale contract) for size and percent of sound wood See "Utilization Standards."

Culmination of Mean Annual Increment (CMAI) — The age at which the average annual growth is greatest for a stand of trees. Mean annual increment is expressed in cubic feet measure and is based on expected growth according to the management intensities and utilization standards assumed in accordance with 38 CFR 219.16(a)(2)(i) and (ii). Culmination of mean annual increment includes regeneration harvest (cutting) yields and any additional yields from planned intermediate harvests (cuttings).

Cultural Resource — The physical evidence of our Nation's heritage. Included are: archaeological sites; historic buildings, structures, and districts; and localities with social significance to the human community. In the plan, they are classified as archaeological and historical properties, and American Indian religious and cultural use areas.

Cumulative Effects or Impacts — The impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal, or nonfederal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. (40 CFR 1508.7 — these regulations use effects and impacts synonymously)

DBH (d.b.h.) — Diameter at breast height, measured at 4 feet 5 inches from the ground.

Debris Slide — A shallow landslide of soil, rock, and organic material that occurs on steep slopes.

Debris Torrent — A large debris slide that is charged with water and confined to a steep stream channel. Debris torrents may travel several thousand feet.

Decision Space — Decision space defines the outer limits past which it is not physically, biologically, or economically possible to produce a feasible combination of Forest goals and services, and land allocations

Demand — The amount of an output that users are willing to take at a specified price, time period, and condition of sale

Departure — A sale schedule that deviates from the principle of non—declining flow by exhibiting a planned decrease in the sale schedule at any time during the planning horizon. A departure can be characterized as a temporary increase, usually in the beginning decade(s) of the planning horizon, over the base sale schedule that would otherwise be established, without impairing the future attainment of the long-term sustained yield capacity.

Developed Recreation — Recreation that requires facilities that, in turn, result in concentrated use of an area. Examples of recreation areas are campgrounds and ski areas; facilities in these areas might include roads, parking lots, picnic tables, toilets, drinking water, ski lifts, and buildings See “Recreation Development Scale (Level).”

Dispersed Recreation — A general term referring to recreation use outside a developed recreation site, such as scenic driving, hiking, fishing, cross-country skiing, horseback riding, snow mobiling, hunting, backpacking, and recreation in primitive environments.

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

Douglas-fir Type — An association of tree species in which Douglas-fir is recognized as one of the principal seral species.

Draft Environmental Impact Statement (DEIS) — The draft 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.

Duff — Organic matter in various stages of decomposition on the floor of the forest.

Early Forest Succession — The early stage or condition of a plant community that occurs during its development from bare ground to climax.

Economic Efficiency — The usefulness of inputs (costs) to produce outputs (benefits) and effects when all costs and benefits that can be identified and valued are included in the computations Economic efficiency is usually measured using present net value, though use of benefit-cost ratios and rates-of-return may sometimes be appropriate.

Economic Impacts:

1. **Direct economic impact** — effects caused directly by forest product harvest or processing or by forest uses.
2. **Indirect economic impact** — effects that occur when supporting industries sell goods or services to directly affected industries.
3. **Induced economic impact** — effects that occur when employees or owners of directly or indirectly affected industries spend their income within the economy.

Ecosystem — An interacting system of organisms considered together with their environment; for example, marsh, watershed, and lake ecosystems

Edge — An interfacial area where plant communities meet or where successional stages or vegetative conditions within plant communities come together. See also “Diversity,” “Edge Contrast” and “Horizontal Diversity.”

Plan - Glossary

Edge Contrast — A qualitative measure of the difference in structure of two adjacent vegetated 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 occur later in time and/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, water, and/or other natural systems, including ecosystems.

Effects and impacts as used in this statement/plan 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).

Electronic Sites — Areas designated for the operation of equipment which transmits and receives radio signals (excluding television aerials and antennas) for individual pickup of programming, and passive reflectors.

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

Ending Inventory Constraint — The standing volume left in the inventory at the end of the planning horizon. The constraint insures that there is enough standing inventory at the end of the planning horizon to perpetuate long-term sustained yield capacity harvest levels on a nondeclining flow basis.

Environmental Analysis — A process associated with the preparation of an environmental assessment or environmental impact statement. An analysis of alternative actions and their predictable short- and long-term environmental effects, including physical, biological, social, and economic.

Environmental Assessment — A concise public document, providing sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact.

Environmental Impact Statement (EIS) — A statement of the environmental effects of a proposed action and alternatives to it. 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. 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. See DEIS and FEIS.

Environmental Protection Agency (EPA) — An agency of the Executive Branch of the Federal Government which has the responsibility for environmental matters of national concern.

Erosion — 1) The wearing away of the land surface by running water, wind, ice, or other geologic agents, including such processes as gravitation creep; or 2) detachment and movement of soil or rock fragments by water, wind, ice, or gravity.

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 (tree sizes) throughout the forest area. Clearcut, shelterwood, or seed tree cutting methods produce even-aged stands. (35 CFR 219.3)

Even-aged Stands — Stands in which all trees are of about the same age. (A spread of 10 to 20 years is generally considered one age class.) Cutting methods producing even-aged stands are clearcut, shelterwood, or seed tree systems.

Existing Visual Condition (EVC) — The “Existing Visual Condition” of the Forest was prepared in 1979. See “Visual Condition.”

Final Environmental Impact Statement (FEIS) — The final version of the statement of environmental effects required for major federal actions under section 102 of the National Environmental Policy Act. A revision of the draft environmental impact statement to include public and agency responses to the draft.

Final Harvest — Synonymous with “regeneration cutting” (harvest) in the clearcutting silvicultural system.

Fisheries Habitats — Streams, lakes, and reservoirs that support fish populations.

Floodplain — The lowland and relatively flat areas adjoining inland and coastal waters including, at a minimum, those areas subject to a 1-percent or greater chance of flooding in any given year (100-year recurrence).

Flood Proof — Using special measures during road construction to insure that flood occurrences will not cause road damage.

Forage — All browse and nonwoody plants that are available to livestock or game animals and used for grazing or harvested for feeding.

Forb — Any herb other than grass.

Foreground — A term used in visual management to describe the portions of a view between the observer and up to 1/4 to 1/2 mile distant. The stand of trees immediately adjacent to a high—value scenic area, recreation facility, or forest highway. See “Background,” “Middleground.”

Forest or Forest Land — 1) Forest is used in the text as a proper noun to substitute for Mt. Baker-Snoqualmie National Forest. 2) See “Timber Resource Land Suitability Classification.”

Plan - Glossary

Forest Model — An idealized (simplified) representation of the real life Forest system, developed from a set of simplifying assumptions. The “Forest Model” serves as a format to structure Forest management resource data, i.e. yields (activities and outputs) over time, acres, and management constraints. The “Forest Model” developed by the interdisciplinary team was incorporated into the computer program model FORPLAN for use in this planning effort. See “FCRPLAN.” See Appendix B for more detail.

Forest Service Handbook (FSH) — For Forest Service use, directives that provide detailed instructions on how to proceed with a specialized phase of a program or activity.

Forest Service Manual (FSI) — A system of manuals which provides direction for Forest Service activities.

Forest Types — A classification of forest land based upon the tree species presently forming a plurality of basal area stocking in live trees.

FORPLAN — Acronym for Forest Planning Model. A linear programming system used for developing and analyzing forest planning activities. Can be used to simulate management practices while at the same time optimizing for any given desired objective. As a manageable representation of reality, it can be used to manipulate information and look at alternative approaches to management, calculating tradeoffs and opportunity costs. See “Forest Model.” See Appendix B for more detail.

Fuel Management — The practice of planning and executing the treatment or control of living or dead vegetative material in accordance with fire management direction.

Fuel Treatment — The rearrangement or disposal of natural or activity fuels (generated by management activity, such as slash left from logging) to reduce fire hazard. Fuels are defined as both living and dead vegetative materials consumable by fire.

Fuels — Combustible wildland vegetative materials. While usually applied to above ground living and dead surface vegetation, this definition also includes roots and organic soils such as peat

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

Genetic Integrity — Refers to a normal, healthy genetic pool within a biological population to provide for long—term maintenance and survival of the species. Of specific concern in management direction is the prevention of loss of genetic variance and the avoidance of inbreeding. See the Draft SEIS, Spotted Owl Guidelines for more detail.

Genetic Seedlings — Tree seedlings from a genetically superior seed source. The seeds are collected from trees displaying exceptional form and raised in nurseries before outplanting. The seedlings usually have faster growth rates than naturally regenerated seedlings.

Geothermal — Of or pertaining to the internal heat of the earth.

Glaciolacustrine — Soil, materials transported by glaciers and deposited by glacial meltwater in glacier lakes.

Goal — A concise statement that describes a desired condition to be achieved sometime in the future. It is normally expressed in broad, general terms with no specific completion date. Goal statements form the principal basis from which objectives are developed.

Goods:

1. Nonmarket good — an output that is not normally exchanged for money in a market. Usually no market has evolved because ownership of the good is not clear, exclusive use is not possible under current laws, or it is not possible to consistently define good.
2. Public good — an output for which it is impractical to impose a charge, either because it must be supplied to all if it is supplied to one or because the costs of collection and control exceed likely revenue.

Goods and Services — The various outputs, including on-site uses, produced from forest and rangeland resources.

Grass/forb — An early forest successional stage where grasses and forbs are the dominate vegetation.

Group Selection Cutting — Removal of tree groups ranging in size from a fraction of an acre up to about 2 acres. Area cut is smaller than the minimum feasible under even-aged management for a single stand.

Growing Season — That part of the year when temperature and moisture are favorable for vegetation growth.

Growing Stock Trees — Live trees, meeting specified standards of quality or vigor, that are included in growth and yield projections to arrive at the allowable sale quantity.

Guideline — An indication or outline of policy or conduct that is not a mandatory requirement (as opposed to a standard, which is mandatory).

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

Habitat Capability — The estimated ability of an area, given existing or predicted habitat conditions, to support a wildlife, fish or plant population. Measured in terms of potential population numbers.

Habitat Diversity — The distribution and abundance of different plant and animal, communities and species with a specific area.

Hardwood — A broad-leaved flowering tree.

Harvest Cutting Method — A combination of interrelated actions whereby forests are tended, harvested, and replaced The combination of management practices used to manipulate the vegetation results in forests of distinctive form and character. Harvest cutting methods are classified as even-aged and uneven-aged. See “Silvicultural System “

Plan - Glossary

Harvest Dispersion (factor) — The dispersion of cutting units over the land base in order to meet clearcut size limitations, or other resource constraints. An example of a harvest dispersion constraint is: no more than 25 percent of an analysis area may be harvested in one decade.

Headwaters — The upper tributaries of a river.

Herbaceous — An adjective describing seed-producing plants that do not develop persistent woody tissue, but die down to ground level at the end of the growing season.

Hiding Cover — Any vegetation used by wildlife for security or to escape from danger. For example, hiding cover is capable of hiding 90 percent of an adult deer or elk from the view of a human at a distance of 200 feet or less.

Historic Site — Site associated with the history, tradition, or cultural heritage of national, state, or local interest. and of enough significance to merit preservation or restoration.

Horizontal Diversity — The distribution and abundance of 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 (or richness). This concept is similar but not identical to “even-aged management.” Application of even-aged management, for example, can be designed to accomplish horizontal diversity objectives. See also “Vertical Diversity.”

Hydrology — The scientific study of the properties, distribution, and effects of water in the atmosphere, on the earth’s surface, and in soil and rocks

ID Team — See Interdisciplinary Team.

Impacts — See Effects.

IMLAN — A computer—based system used by the Forest Service for constructing nonsurvey input/output models to measure economic input. The system includes a data base for all countries in the U.S. and a set of computer programs to retrieve data and perform the computational tasks for input/output analysis.

Indicator Species — Species identified in a planning process that are used to monitor the effects of planned management activities on viable populations of wildlife and fish including those that are socially or economically important. See Management Indicator Species.

Instream Flows — A prescribed level (or levels) of streamflow, usually expressed as a stipulation in a permit authorizing a dam or water diversion, for the purpose of meeting National Forest System management objectives

Integrated Pest Management — A process for selecting strategies to regulate forest pests, in which all aspects of a pest-host system are studied and weighed. A basic principle in the choice of strategy is that it be ecologically compatible or acceptable. (36 CFR 219.3)

Intensive Forest Management — A high investment level of timber management that envisions initial harvest, regeneration with genetically improved stock, control of competing vegetation, fill-in planting, precommercial thinning as needed for stocking control, one or more commercial thinnings, and final harvest.

Interdisciplinary Approach — Using individuals representing two or more areas of knowledge and skills focusing on the same tasks, problem, or subject.

Interdisciplinary Team (ID Team) — A group of individuals with different training assembled to solve a problem or perform a task. The team is assembled out of recognition that no one scientific discipline is sufficiently broad to adequately assess the situation.

Intermediate Cutting — Any removal of trees from a regular crop or stand between the time of its formation and the harvest cutting (final harvest). Generally includes cleaning, thinning, liberation, and improvement cuttings, increment fellings, and sometimes even salvage and sanitation cutting

Intermingled Ownerships — Lands within the National Forest boundaries or surrounded by National Forest lands owned by private interests or other government agencies. Because of early land grants, these lands frequently are in a checkerboard ownership pattern.

Intermittent Stream — A stream that runs water in most months, but does not run water during the dry season during most years.

Irretrievable — Applies to losses of production, harvest, or use 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 non-renewable resources, such as minerals or cultural resources, or to those factors, such as soil productivity, that are renewable only over long time periods. 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

J-8 — A map code used on this Forest to designate unsuitable forest land not managed for timber production because there is no reasonable assurance that these lands can be adequately restocked within 5 years after harvest. This is based on existing technology and knowledge as reflected in current research and experience. See “Timber Resource Land Suitability Classification, 3.(d).”

Knutsen—Vandenberg Fund (KV) — Authorization to withhold a portion of timber sale receipt funds for reforestation of harvested areas, rehabilitation of streams and habitat affected by timber sales, etc.

Lacustrine — Refers to material deposited in lake water and later exposed either by lowering of the water level or by the elevation of the land.

Land Allocation — The assignment of a particular land area(s) to a specific “Management Area.”

Plan - Glossary

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

Landownership Classification Groups — All National Forest land and land in other ownerships within the Forest boundary will be classified in one of five landownership classification groups. This classification system identifies opportunities to acquire, retain, exchange, or relinquish lands to facilitate administration of the Forest (FSM 1920.42, 1982 or as revised).

Group I — Lands where Congress has either directly or indirectly instructed the Forest Service to retain ownership and acquire non-Federal lands for a designated purpose.

Group II — Retain National Forest ownership and acquire private land as the opportunity and/or need occurs.

Group III — Lands are available for land adjustment and usually will provide most of the land considered in exchange projects.

Group IV — Lands normally made available to acquire private lands in Groups I, II, or III.

Group V — More intensive study and planning are necessary before landownership decisions are made.

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

Lands Not Suited (Unsuitable) for Timber Production — Includes lands that: 1) are not forest land as defined in CFR 219.3; 2) are likely, given current technology, to suffer irreversible resource damage to soils productivity, or watershed condition; 3) cannot be adequately restocked as provided in 36 CFR 219.27; or, 4) have been withdrawn from timber production by an Act of Congress, the Secretary of Agriculture, or the Chief of the Forest Service. In addition, Forest lands other than those that have been identified as not suited for timber production shall be reviewed and assessed prior to formulation of alternatives to determine the costs and benefits of a range of management intensities for timber production.

Legendary — Locations that may have, or may have had, spiritual significance. They appear also to be areas which are significant to the cosmology of the Indian groups in the project area. They are significant in mythology having to do with the origin and development of the area and of the people of that area.

Limits of Acceptable Change (LAC) — Maximum limit of human-caused change allowed in wilderness. Each WROS Class has a set of limits which presupposes that certain areas of wilderness (trails) will be allowed to receive higher levels of use than other areas (trailless), and thus will receive more change or resource impact. LAC's are not a management objective, but a maximum limit. See "Wilderness Recreation Opportunity Spectrum."

Local Roads — See "Road, Local"

Logging Systems — See “Yarding.”

Tractor — Use of tracked or rubber-tired vehicle to skid logs to a central loading point. This method is typically used on dry, gently sloping ground; it is infrequently used on this Forest.

Hightead — A cable system operated from a tower or spar-tree, which drags logs to a central loading site. One end of a log may be lifted off the ground for short distances. Used most often in moderately steep terrain over relatively short distances.

Skyline — The log yarding cable is attached between a tower or spar-tree and an elevated point in the distance. Logs are transported partially or completely suspended above the ground with a movable carriage on the cable. Used in steep or unstable terrain with minimal impacts on the land, this method can reach for long distances.

Helicopter — Use of helicopter to lift logs from a logging site to a nearby central loading point. Most economical on relatively remote and difficult to reach sites. Avoids road building where roading is inappropriate because of steep terrain, unstable soils, visual consideration, etc.

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

Macropore Space — Space in soil composed of larger pore spaces. See “Pore space,” “Porosity,” and “Soil.”

Management Area — An area or non-contiguous areas of the Forest assigned to a specific management strategy (the management strategy then becomes the management prescription for the area(s)).

Management Concern — An issue, problem, or condition which constrains the range of management practices identified by the Forest Service in the planning process.

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

Management Emphasis — The major resource uses, outputs, and activities emphasized in a management area.

Management Indicator Species (MIS) — A species selected because its welfare is presumed to be an indicator of the welfare of other species using the same habitat. A species whose condition can be used to assess the impacts of management actions on a particular area. See “Indicator Species.”

Management Intensity — A management practice or combination of management practices and associated costs designed to obtain different levels of goods and services.

Management Practice — A specific activity, measure, course of action, or treatment

Plan - Glossary

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 Requirement (MW) — Minimum standards for resource protection, vegetation manipulation, silvicultural practices, even-aged management, riparian areas, soil and water diversity, to be met in accomplishing National Forest System goals and objectives.

Management Strategy — A specific set of management practices appropriate for application to Forest lands or resources. The management strategy should define the management goals or objectives, resource priorities, and intensities to be considered. See “Management Area” and “Management Prescription.”

Marginal Component — The portion of the regulated commercial Forest land on which it is presently not feasible (economically or technologically) to manage for timber crops because of soil constraints, difficulties in establishing tree regeneration or excessive development costs.

Market Resources — Products derived from renewable and nonrenewable resources that have a well-established market value for example, forage, timber, water, and minerals.

Market Value — The unit price of an output normally exchanged in a market after at least one stage of production. Market value is expressed in terms of prices as evidenced by market transactions.

Mass Movement — A general term for any of the variety of processes by which large masses of earth material are moved downslope by gravitational forces — either slowly or quickly.

Mass Wasting — All landslide events; the detachment and movement of soil or surface mantle material. Landslides may fall in a single mass or single event, moving downslope to cause debris slides and avalanches, or they may detach and move slowly downslope over a period of years.

Maximum Modification — See “Visual Quality Objectives.”

May (or Can) — Verb used in the Management Prescriptions, Proposed Forest Plan. Action is optional.

MBF — One thousand board feet. Lumber or timber measurement term.

MCF — One thousand cubic feet. Lumber or timber measurement term.

Mean Annual Increment (MAI) — The total increment up to a given age divided by that age.

Mesotrophic — Habitats, particularly soil and water, of moderate nutrient capacity.

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.”

Mineral Entry — The filing of a mining claim upon public domain or related land to obtain the right to any minerals it may contain.

Mineral Soil. — A soil consisting predominantly of, and having its properties determined predominantly by mineral matter. It usually contains less than 20% organic matter but may sometimes contain an organic surface layer up to 30 centimeters thick. Mineral soil is the soil where surface erosion of individual soil particles can take place, not the loose unconsolidated organic surface layer.

Mineral Withdrawal — The exclusion of mining locations and mineral development work on areas required for administrative sites by the Forest Service and other areas highly valued by the public.

Minerals —

1. **Common** — mineral deposits which do not possess distinct, special economic value, such as common varieties of sand, stone, gravel, pumice, pumicite and cinders. They may have value for use in trade, manufacture, science, or in the mechanical or ornamental arts.
2. **Leasable** — federally owned minerals which are disposed of under the Mineral Leasing Act of 1920, as amended. These include coal, oil, gas, phosphate, sodium, potassium, oil shale, and in some states sulphur and geothermal steam.
3. **Locatable** — federally owned minerals which can be located and patented under the 1892 Mining Law, as amended. In general, the locatable minerals are those hardrock minerals which are mined and processed for the recovery of metals. They also may include certain nonmetallic minerals and uncommon varieties of mineral materials, such as valuable and distinctive deposits of limestone or silica.
4. **Valuable Deposit** — where minerals have been found and the evidence is of such a character that a person of ordinary prudence would be justified in further expenditure of his labor and means with a reasonable prospect of success in developing a valuable mine.

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

Minimum Viable Population — The low end of the viable population range.

Mining Claim — A portion of the public lands which a miner, for mining purposes, takes and holds in accordance with mining laws.

Mining Claim, Perfection — All steps legally required to give a secured party an interest in subject property have been met. One cannot perfect a mining claim without actual discovery of minerals in place. Perfection occurs when a discovery of a “valuable” mineral deposit has been made within the boundaries of a mining claim which has been located on public lands in conformance with State and Federal statutes. Once the claim has been perfected, the claim has the effect of a grant by the US of the right of present and exclusive possession and the claimant may receive patent. Discovery normally precedes location, but (US v. Carlile 67 I.D. 417, 420 (1960)) discovery may follow location and give validity to a previously located claim as of the time the discovery was made. When such occurs, the claim has been perfected.

Plan - Glossary

Mining Claim, Validity — Synonymous with perfection when exclusive rights against the government are concerned. For a claimant to establish exclusive rights against the government, the claim must be located on public lands in conformance with State and Federal statutes and a discovery of a valuable mineral deposit must have been made within the boundaries of the claim.

Mitigation — Avoiding or minimizing impacts by limiting the degree or magnitude of the action and its implementation; rectifying the impact by repairing, rehabilitating, or restoring the effected environment; reducing or eliminating the impact by preservation and maintenance operations during the life of the action.

MMBF — Million board feet. Lumber or timber measurement term.

MMCF — Million cubic feet. Lumber or timber measurement term.

Model — See “Forest Model.”

Modification — See “Visual Quality Objectives.”

Monitoring — A process to collect significant data from defined sources to identify departures or deviations from expected plan outputs.

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.

Municipal Supply Watershed — A watershed that provides water for human consumption, where Forest Service management could have a significant effect upon the quality of water at the intake point, and that provides water used by a community, or any other public water system that regularly serves at least 25 individuals at least 60 days out of the year or that provides at least 15 service connections. In addition to cities, this includes campgrounds, residential developments, and restaurants.

Must (or Shall) — A verb used in the Management Prescriptions, in the Proposed Forest Plan. Action is mandatory.

National Environmental Policy Act (NEPA) of 1969 — An act to declare a National policy which will encourage productive and enjoyable harmony between humankind and the environment, to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of humanity, to enrich the understanding of the ecological systems and natural resources important to the Nation, and to establish a Council on Environmental Quality. (The Principal Laws, Relating to Forest Service Activities, Agriculture Handbook No. 453, USDA, Forest Service, 359 pp.)

National Forest Management Act (NFMA) of 1976 — A law passed 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) Land — Federal lands that have been designated by Executive order or statute as National Forests, National Grasslands, or Purchase Units, and other lands under the administration of the Forest Service, including Experimental Areas and Bankhead-Jones Title III lands.

Natural Forest — The Forest that would occur on the planning area if natural processes were allowed to function without man's influence.

Natural Regeneration — Reforestation of a site by natural seeding from the surrounding trees. May or may not be preceded by site preparation.

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

Net Receipts — Net receipts are the total cash receipts received by the Forest Service less budget costs.

Nitrogen-Fixing (Nitrogen Fixation) — Conversion of free nitrogen into combined forms useful in nutrient cycles and other functions in the biosphere.

Noncash Benefits — These are benefits or values that people derive from the good or service being provided, but where there is no market in which to exchange that good or service for cash, i.e. the person benefiting does not pay any of the actual value received.

Nonchargeable Volume — All volume that is not included in the growth and yield projections for the selected management prescriptions used to arrive at the allowable sale quantity. (FSH 2409.13)

Non-consumptive Use — That use of a resource that does not reduce its supply, for example, non-consumptive uses of water include hydroelectric power generation, boating, swimming, and fishing.

Non-declining Flow — Where 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.

Non-forest Land — Lands that never have had or that are incapable of having 10 percent or more of the area occupied by forest trees; or lands previously having such cover and currently developed for nonforest use.

Nongame — Species of animals not managed for sport hunting

Plan - Glossary

Non-market — Products derived from National Forest resources that do not have a well-established market value for example, recreation, wilderness, wildlife.

Not Appropriate Land — See 36 CFR 219.4 and FSH 2409.13-23. See “Timber Resource Land Suitability Classification. Unsuitable.”

No-Trace Camping — A concept of recreation use in wilderness which encourages the recreation user to leave “No-Trace” of a visit to aid in protection of the wilderness resource.

Not Suited Lands — See 36 CFR 219.14. See “Timber Resource Land Suitability.”

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

Off-Road Vehicle (ORV) — Any motorized vehicle designed for or capable of cross-country travel on or immediately over land, water, sand, snow, ice, marsh, swampland, or other natural terrain. The term excludes any registered motorboat, any military, fire, emergency, or law enforcement vehicle when used for emergency purposes, and any vehicle whose use is expressly authorized by the respective agency head under a permit, lease, license, or contract. (Executive Order 11644)

Old-Growth Stand — Any stand of trees 10 acres or greater generally containing the following characteristics: 1) stands contain mature and overmature trees in the overstory and are well into the mature growth stage; 2) stands will usually contain a multi-layered canopy and trees of several age classes; 3) standing dead trees and down material are present; and 4) evidence of human activity may be present, but does not significantly alter the other characteristics and would be a subordinate factor in a description of such a stand.

Opportunity Cost — The dollar-quantifiable net loss resulting from a less efficient course of action.

Optimal Cover — A forest stand with: 1) four layers (overstory canopy, sub canopy, shrub layer, and herbaceous layer); and 2) an overstory canopy which can intercept and hold substantial amount of snow yet has dispersed (<1/8 acre) openings. These criteria are generally achieved when the dominant trees average 21 inches dbh or greater, have 70 percent or greater crown closure, and are in the large saw timber or old-growth condition.

Optimum Density — For wildlife, the maximum rate of animal stocking possible without inducing damage to vegetation or rotated resources; may vary from year to year because of environmental and/or population factors.

Organization Camp — A privately-operated facility providing lodging, meals, social, and educational recreation opportunities in a forest environment. An organization camp is operated on National Forest land under “Special Use Permit.”

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

Overtature — The stage at which a tree declines in vigor and soundness, for example past the period of rapid height growth.

Overstory — That portion of the trees, in a forest of more than one story, forming the upper or uppermost crown canopy.

Ozone — An allotropic triatomic form of oxygen that is normally a faintly blue irritating gas with a characteristic pungent odor. A predominant compound in a layer of the Earth's atmosphere (the ozone layer) which plays a key role in filtering the Sun's radiation.

Partial Retention — See "Visual Quality Objectives."

Particulate (Concerning air quality) — Minute separate particle of matter suspended in air. Particulate as a measure of air quality condition or standard is expressed in microns per cubic meter.

Penstock — A sluice or gate for regulating a flow (as of water); or a conduit or pipe for conducting water.

Perennial Stream — A stream that flows year round.

Persons-At-One-Time (PAOT) — The number of people in an area or using a facility at the same time. May be used as "maximum PAOT" to indicate the capacity of an area or facility to support peak usage within established user density standards and without degradation to biophysical resources.

Planning Criteria — Criteria prepared to guide the planning process. Criteria applied to collection and use of inventory data and information, analysis of the management situation, and the design, formulation, and evaluation of alternatives.

Planning Horizon — The overall time period considered in the planning process. Spans all activities covered in the analysis or plan and all future conditions and effects of proposed actions which would influence the planning decision.

Planning Period — One decade. The time interval within the planning horizon that is used to show incremental changes in yields, costs, effects, and benefits.

Planning Records — The body of information documenting the decisions and activities which result from the process of developing a Forest Plan, revision, or significant amendment.

Pore Space — Total space not occupied by soil particles in a bulk volume of soil, commonly expressed as a percentage.

Plan - Glossary

Porosity — The degree to which the total volume of a soil, sediment, or rock is permeated with pores or cavities, generally expressed as a percentage of the whole volume unoccupied by solid particles.

Potential Yield — Sustainable output of wood fiber available after the yield foregone for the management opportunities of other resources has been deducted from the biological potential.

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

Prescribed Fire — A wildfire burning under specified conditions that will accomplish certain planned objectives. The fire may result from either planned or unplanned ignitions. Use of unplanned ignitions must have prior approval by the Regional Forester.

Present Net Value (PNV) — The difference between the discounted value (benefits) of all outputs to which monetary values or established market prices are assigned and the total discounted costs of managing the planning area. (36 CFR 219.3)

Preservation — See “Visual Quality Objectives.”

Presuppression — Activities organized in advance of fire occurrence to ensure effective suppression action.

Primary Cavity Excavators — Wildlife species that excavate cavities in wood, for food and shelter Example: woodpeckers.

Primitive — See “Recreation Opportunity Spectrum (ROS)”

Program Element — Forest Service areas of responsibility, such as “Wildlife”, “Recreation”, “Timber” based upon the National Forest budgeting process. Used in this Forest Plan to organize the management area standards and guidelines and tie to budgeting.

Programmed Harvest — The amount of timber on the Forest that is scheduled for harvesting. The programmed harvest is based on current demand, funding, and multiple-use considerations

Project — An organized effort to achieve an objective identified by location, timing, activities, outputs, effects, accountability, and control of a project.

Public Issue — A subject or question of widespread public interest relating to management of National Forest system. (36 CFR 219.3)

Puddling — Soil puddling is a physical change in soil properties due to shearing forces that destroy soil structure and reduce porosity. Detrimental puddling can be observed as vehicle tracks when soil is molded and when depth of rutting has reached 6 inches or more.

Purchaser Credit — Credit earned by the purchaser of a National Forest timber sale by construction of contract-specified roads. Earned purchaser credit may be used by the purchaser as payment for National Forest timber removed.

Range — Land producing native forage for animal consumption, and lands that are revegetated naturally or artificially to provide forage that is managed like native vegetation.

Raptors — Predatory birds, such as falcon, hawks, eagles, or owls.

Real Dollar Value — A monetary value which compensates for the effects of inflation.

Reasonable Assurance — For the purposes of regeneration suitability decisions in the Forest planning process, “reasonable assurance” is provided when:

- 1) One or more reforestation projects are known to exist on NFS or non-NFS lands within the subject ecosystem or land stratum, which have succeeded in meeting Regional standards for adequate restocking (as defined in a subsequent portion of the direction), and either;
- 2) The practices used in achieving the regeneration success are known and are accepted by experts in the field of reforestation as being generally applicable to the ecosystem or land stratum being examined.
- 3) Research results exist which are applicable to the subject ecosystem or land stratum and which provide the means to prescribe treatment(s) that will lead to successful reforestation.

Where a successful regeneration project cannot be found, or applicable research does not exist to demonstrate that a prescription can be written to accomplish reforestation; reasonable assurance of regeneration has not been provided. The stratum or ecotype, therefore, will be classed as not suited for timber production due to regeneration difficulty.

Management prescriptions rely on existing technology. Existing technology includes all techniques that have been proven in research or demonstrated successfully on the ground. Cost of practices will not be a criterion for excluding lands from the suitable land base at this stage in the planning process. For this round of planning, irrigation, exotic-species, and soil importation practices will not be considered as existing technology.

In determining whether or not natural regeneration may be reasonably assured, a certified silviculturist must be able to write a prescription that will provide for successful reforestation within a 5-year period following clearcutting, or a 10-year period following the seed cut when using the shelterwood method of regeneration cutting. The regeneration period is considered to start when the trees in a harvest unit are felled, and ends when the unit is adequately restocked.

Explanatory Notes: the phrase “reasonable assurance” is a subjective expression and is, therefore, not completely definable by precise objective and quantitative terms. By its very nature, the phrase recognizes the necessity of arriving at a decision through judgmental (subjective) processes rather than through precise quantitative analysis (objective) procedures based on measurable data with known statistical reliability.

Receipts — Those priced benefits for which money will actually be paid to the Forest Service recreation fees, timber harvest, mineral leases and special use fees.

Plan - Glossary

Record of Decision — A document separate from but associated with an Environmental Impact Statement which states the decision, identifies all alternatives, specifying which were environmentally preferable, and states whether all practicable means to avoid environmental harm from the alternative have been adopted, and if not, why not.

Recreation Capacity — The number of people that can take advantage of the supply of a recreation opportunity during an established use period without substantially diminishing the quality of the recreation experience or the biophysical resources.

Recreation Development Scale (Level) — This is a scale of the level of recreation site modification and development coordinated with the ROS classes. The five development scales are described below. See “Recreation Opportunity Spectrum” and “Recreation Development.”

Recreation Information Management (RIM) — A computer-oriented system for the organization and management of information concerning recreation use, occupancy, and management of National Forest lands.

Recreation Opportunity — The availability of choices for users to participate in the recreational activities they prefer within the settings they prefer.

Recreation Opportunity Spectrum Class	Development Scale	Level of Site Modification
Primitive	1	Minimum site modification. Rustic or rudimentary improvements designed for protection of the site rather than comfort of the users. Use of synthetic materials excluded. Minimum controls are subtle. No obvious regimentation. Spacing informal and extended to minimize contacts between users. Motorized access not provided or permitted.
Semi-primitive	2	Little site modification. Rustic or rudimentary improvements designed primarily for the protection of the site rather than the comfort of the users. Motorized access provided or permitted.
Nonmotorized		Use of synthetic materials avoided. Minimum controls are subtle. Little obvious regimentation. Spacing informal and extended to minimize contacts between users. Primary access over primitive roads. Interpretive services informal, almost subliminal.

Roaded Natural	3	Site modification moderate. Facilities about equal for protection of site and comfort of users. Contemporary/rustic design of improvements is usually based on use of native materials. Inconspicuous vehicular traffic controls usually provided. Roads may be hard surfaced and trails formalized. Development density about 3 family units per acre. Primary access may be over high standard roads. Interpretive services informal, but generally direct.
Rural	4	Site heavily modified. Some facilities designed strictly for comfort and convenience of users. Luxury facilities not provided. Facility design may incorporate synthetic materials. Extensive use of artificial surfacing of roads and trails. Vehicular traffic control usually obvious. Primary access usually over paved roads. Development density 3-5 family units per acre. Plant materials usually native. Interpretive services often formal or structured.
Urban	5	High degree of site modification. Facilities mostly designed for comfort and convenience of users and usually include flush toilets; may include showers, bathhouses, laundry facilities, and electrical hookups. Synthetic materials commonly used. Formal walks or surfaced trails. Regimentation of users is obvious. Access usually by high-speed highways. Development density 5 or more family units per acre. Plant materials may be foreign to the environment. Formal interpretive services usually available. Designs formalized and architecture may be contemporary. Mowed lawns and clipped shrubs not unusual.

Recreation Opportunity Spectrum (ROS) — A conceptual framework for defining types of recreation opportunities, physical settings, and experiences a visitor can expect. It is an inventory system and a management tool. There are six ROS classes. Each class, is defined in terms of the degree to which it satisfies certain recreation experience needs, based on the extent to which the natural environment has been modified, the type of facilities provided, the degree of outdoor skills needed to enjoy the area, and the relative density of recreation use. The six classes are:

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

2. Semi-primitive Nonmotorized — Area is characterized by a predominantly natural or natural-appearing environment of moderate to large size. Interaction between users is low, but there is often evidence of other users. The area is managed in such a way that minimum onsite controls and restrictions may be present, but would be subtle. Motorized recreation use is not permitted.
3. Semi-primitive Motorized — Area is characterized by a predominantly natural or natural-appearing environment of moderate to large size. Concentration of users is low, but there is often evidence of other users. The area is managed in such a way that minimum onsite controls and restrictions may be present, but would be subtle. Motorized recreation use of local primitive or collector roads with predominantly natural surface and trails suitable for motor bikes is permitted.
4. Roaded Natural — Area is characterized by predominantly natural-appearing environments with moderate evidence of the sights and sounds of man. Such evidence usually harmonizes with the natural environment. Interaction between users may be moderate to high, with evidence of other users prevalent. Resource modification and utilization practices are evident, but harmonize with the natural environment. Conventional motorized use is allowed and incorporated into construction standards and design of facilities.
5. Rural — Area is characterized by a natural environment that has been substantially modified by development of structures, vegetative manipulation, or pastoral agricultural development. Resource modification and utilization practices may be used to enhance specific recreation activities and to maintain vegetative cover and soil. Sights and sounds of humans are readily evident, and the interaction between users is often moderate to high. A considerable number of facilities are designed for use by a large number of people. Facilities are often provided for special activities. Moderate user densities are present away from developed sites. Facilities for intensified motorized use and parking are available.
6. Urban — Area is characterized by a substantially urbanized environment, although the background may have natural-appearing elements. Resource modification and utilization practices are often used to enhance specific recreation activities. Vegetative cover is often exotic and manicured. Sights and sounds of humans are predominant on site. Large numbers of users can be expected both on site and in nearby areas. Facilities for highly intensified motor use and parking are available with forms of mass transit often available to carry people throughout the site.

Recreation Residence — A privately owned structure, authorized on National Forest land under a “Special Use Permit.”

Recreation Visitor Day (RVD) — A measure of recreation use. Twelve visitor hours, which may be aggregated continuously, intermittently, or simultaneously by one or more persons.

Reforestation — The natural or artificial restocking of an area with forest trees; most commonly used in reference to artificial restocking.

Regeneration — The actual seedling and saplings existing in a stand; or the act of establishing young trees naturally or artificially.

Regeneration Cutting (Harvest) — Any removal of trees intended to assist regeneration already present or to make regeneration possible.

Region — An area covered by a Regional Guide. See FSM 1221.3 for organizational definitions.

Regional Forester — The Forest Service 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. It guides all natural resource management activities, and establishes management standards and guidelines for the National Forest System lands within a given Region. It also disaggregates the assigned Regional RPA objectives 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.

Rehabilitation — Action taken to restore, protect, or enhance site productivity, water quality, or other resource values over a period of time.

Release — Freeing trees from competition for light, water, and nutrients by removing or reducing the vegetation growth that is overtopping or closely surrounding them.

Released Roadless — See “1) Unroaded,” and “Roadless Areas.”

Renewable Resources — Resources that are possible to use indefinitely, when the use rate does not exceed the ability to renew the supply.

Research Natural Area (RNA) — In USDA Forest Service usage, RNAs are areas designated to ensure representative samples of as many of the major naturally-occurring plant communities as possible. An area established specifically to preserve a representative sample of an ecological community, primarily for scientific and educational purposes.

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

Residue Utilization — Removal and use of forest residue (such as slash, litter, brush, dead trees, and snags) for energy production, home heating, or wood products.

Resource — Anything which is beneficial or useful - be it animal, vegetable, mineral, a location, a labor force, a view, an experience, etc. Resources, in the context of land use planning, thus vary from such commodities as timber and minerals to such amenities as scenery, scenic view points, or recreation opportunities.

Plan - Glossary

Resource Use and Development Opportunities — A possible action, measure, or treatment and corresponding goods and services identified and introduced during the scoping process, which subsequently may be incorporated into and addressed by the Forest Land and Resource Management Plan in terms of a management prescription.

Retention — See “Visual Quality Objectives.”

Riparian — Pertaining to areas of land directly influenced by water. Riparian areas usually have visible vegetative or physical characteristics reflecting this water influence. Stream sides, lake borders, or marshes are typical riparian areas.

Riparian Area — A geographically delineated area with distinctive resource values and characteristics that is comprised of aquatic and riparian ecosystems. This includes floodplains, wetlands, and all areas within a horizontal distance of approximately 100 feet from the normal line of high water of a perennial stream channel or from the shoreline of other bodies of water.

Riparian Ecosystem — A transition between the aquatic ecosystem, and the adjacent upland terrestrial ecosystem. Identified by soil characteristics and distinctive vegetation communities that require free or unbound water.

Road:

1. **Arterial** — A road that serves a large land area and usually connects with a public highway or other arterial road to form an integrated network of primary travel routes. The location and standard are often determined by a demand for maximum mobility and travel efficiency rather than specific resource-management service. They are usually developed and operated for long-term land and resource management purposes and constant service.
2. **Collector** — A road that serves a smaller land area than an arterial road and is usually connected to an arterial road or public highway. They collect traffic from local roads or terminal facilities. The location and standard are influenced by both long-term multi-resource service needs, as well as travel efficiency. Collector roads may be operated for either constant or intermittent service, depending on land use and resource management objectives for the area served by the facility (FSM 7700).
3. **Local** — A road that connects terminal facilities with a collector road, arterial road, or public highway. The location and standard are usually determined by that required to serve a specific resource activity, rather than travel efficiency. Local roads may be developed and operated for either long- or short-term service.

Roaded Natural (RN) — See “Recreation Opportunity Spectrum.”

Roaded Modified (RM) — A classification of the Recreation Opportunity Spectrum that characterizes a predominately altered environment, allowing for noticeable to strongly-evident management activity.

Roadless Area Review and Evaluation (RARE II) — A comprehensive process directed by the Secretary of Agriculture to identify roadless and undeveloped land areas in the National Forest system and to determine their uses for either wilderness or other resource management and development and to determine areas that would require further planning to make such a decision.

Roadless Areas — These lands, inventoried in the Roadless Areas Review and Evaluation (RARE II), were not designated wilderness by the Washington State Wilderness Act of 1984. See “Released Roadless,” and “Unroaded.”

Rotation — The number of years required to establish, including the regeneration period, and grow timber crops to a specified condition or maturity for regeneration harvest. Rotation age is based on the selected management prescriptions in a Forest Plan Alternative.

RPA — 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 completed in 1985.

S-8 — A map code used to designate unsuitable forest land that is not managed for timber production because technology is not available to prevent irreversible damage to soils productivity, or watershed conditions. See “Timber Resource Land Suitability Classification, (3)C.”

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

Salvage Cutting (Harvest) — The exploitation of trees that are dead, dying, or deteriorating before their timber becomes worthless. Cutting done essentially to prevent the spread of pests or pathogens is termed “Sanitation Cutting.”

Sanitation Cutting — See “Salvage Cutting.”

Saprophyte — A plant living on dead or decaying organic matter.

Saturation Density — (Same as tolerance density). Intraspecific tolerance permits no future increase. Is most marked in territorial species. Space is the limiting factor to the further increase of this population density.

Sawtimber — Trees containing at least one 12-foot sawlog or two noncontiguous 8-foot logs, and meeting regional specifications for freedom from defect. Softwood trees must be at least 9 inches in diameter and hardwood trees 11 inches in diameter at breast height.

Scarified — Land in which the topsoil has been broken up or loosened in preparation for regenerating by direct seeding or natural seedfall. Also refers to ripping or loosening road surfaces to a specified depth for obliteration or “putting a road to bed”.

Plan - Glossary

Scenic Areas — Places of outstanding or matchless beauty which require special management to preserve these qualities. They may be established under 38 CFR 294.1 whenever lands possessing outstanding or unique natural beauty warrant this classification.

Scenic River Areas — See Wild and Scenic River.

Scheduled Timber Harvests — Volumes and acres programmed for harvest which are within the allowable sale quantity. This does not include salvage and sanitation harvesting.

Scion — A detached shoot or twig containing buds from a woody plant and used in grafting.

Scoping Process — A part of the National Environmental Policy Act (NEPA) process; early and open activities used to determine the scope and significance of the issues, and the range of actions, alternatives, and impacts to be considered in an Environmental Impact Statement.

Second Growth — Forest growth that has come up naturally after some drastic interference (for example, wholesale cutting, serious fire, or insect attack) with the previous forest growth.

Sediment — Solid material, both mineral and organic, that is in suspension, is being transported, or has been moved from its site of origin by air, water, gravity, or ice and has come to rest on the earth's surface.

Sedimentary — Rock formed of sediment, such as conglomerate, sandstone, or shales, formed of fragments of other rock transported from their sources and deposited in water. Also, rocks formed by precipitation from solution, as, rock salt and gypsum, or from secretions of organisms, as most limestone.

Seedlings and Saplings — Live trees less than five inches in diameter at breast height. (See also Size Class).

Selection Cutting — The annual or periodic removal of trees (particularly mature), individually or in small groups ("Group Selection"), from an uneven-aged forest to achieve the balance among diameter classes needed for sustaining yield and to establish a new crop of irregular distribution representative of age and/or size classes.

Semi-primitive Motorized ROS Class — See "Recreation Opportunity Spectrum."

Semi-primitive Nonmotorized ROS Class — See "Recreation Opportunity Spectrum."

Sensitive Species — Plant or animal species which are susceptible or vulnerable to activity impacts or habitat alterations. Those species that have appeared in the Federal Register as proposed for classification and are under consideration for official listing as endangered or threatened species, that are on an official State list, or that are recognized by the Regional Forester as needing special management to prevent their being placed on Federal or State lists.

Sensitivity Analysis — A determination of the effects of varying the level of one or more factors, while holding the other factors constant

Sensitivity Levels — These levels represent an evaluation of public use and concern for the scenic quality of the National Forests. In Region B sensitivity levels will be reviewed every 5 years and revised as necessary. There are three sensitivity levels, each identifying a different level of user concern for the visual environment:

1. **Level 1 — Highest Sensitivity Level** — An example would be seen areas from Interstate and U.S. Highways.
2. **Level 2 — Average Sensitivity** — (Also termed “Moderate Sensitivity”) Examples are seen areas from county and Forest system roads not meeting the criteria for Level 1 sensitivity.
3. **Level 3 — Lowest Sensitivity** — An example would be seen areas from a local road in a Management Area where timber production is emphasized.

Seral — A biotic community that is a developmental, transitory stage in an ecological succession.

Series — A level of vegetation classification that is identified by the most common species found in the tree, shrub, and/or herbaceous layer of a plant community. Series is a subdivision of a subformation.

Shall — See “must.”

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.

Should (or ought) — Verb used in the Management Prescriptions, Proposed Forest Plan. Action is required unless justifiable reason exists for not taking action.

Silviculture — The theory and practice of controlling the establishment, composition, constitution (the distribution and representation of age and/or size classes), and growth of forests.

Silvicultural System — A process that applies silvicultural practices, including the tending (thinning, pruning, etc.), harvesting, and replacing, to a stand in order to produce a crop of timber and other forest products. The system is named by the cutting method with which the regeneration is established, e.g. clearcutting, shelterwood, selection and group selection See “Harvest Cutting Methods.”

Site Index — A numerical evaluation of the quality of land for plant productivity, based on the height of dominant trees in a stand at an arbitrarily chosen age.

Plan - Glossary

Site Preparation — 1) An activity (such as prescribed burning, disking, and tilling) performed on a reforestation area, before introduction of reforestation, to ensure adequate survival and growth of the future crop; 2) manipulation follows harvest, wildfire, or construction in order to encourage the growth of favored species. Site preparation may include the application of herbicides; burning, or cutting of living vegetation that competes with the favored species; tilting the soil; or burning of organic debris (usually logging slash) that makes planting or seeding difficult.

Site Productivity — Production capability of specific areas of land.

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

seedling/sapling = less than five-inch diameter

pole/sapling = five-inch to nine-inch diameter

sawtimber = greater than nine-inch diameter

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

Skyline Deflection — The distance a skyline cable drops below line of sight during the yarding operation.

Skyline Logging — See “Logging Systems.”

Skyline Tailhold — Anchors consisting of stumps, trees, deadmen, or rock bolts to hold the end of the skyline yarding cable that is opposite the yarding machine.

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

Slope Class — See “Topographic Class.”

Small Game — Birds and small mammals typically hunted or trapped.

Snag — A standing dead tree.

SOHA (Spotted Owl Habitat Area) — A habitat area designated to support one pair of owls. See the Final SEIS for the Pacific Northwest Regional Guide.

Special Component — The portion of the regulated commercial forest land that needs specially designed treatment of the timber resource to achieve landscape or other key resource objectives

Special Use Permit — The most common permit authorizing use of Forest lands by individuals and public agencies. Examples of use authorized are: recreation residence, pasture, power or telephone line, water transmission pipeline, powerplant, and electronic site.

Soil Stability Classes — A grouping of soil types on the Forest with respect to their tendency to erode or move from natural conditions or land use activities. The three soil stability classes used in the Forest are 1) Stable soils; 2) Moderately unstable; and 3) Highly unstable soils. See “Topographic Classes.”

Spirit Sites — Locations where an individual may seek a personal spirit power. The areas are isolated, include fresh running streams or lakes, or are near some stands of cedar. They may also be areas that are considered imbued with a power of their own.

Stand (Tree Stand) — An aggregation of trees occupying a specific area and sufficiently uniform in species, composition, age arrangement, and condition as to be distinguishable from the forest in adjoining areas.

Standard — A statement which describes a condition when a job is done properly. Standards show how well something should be done, rather than what should be done.

Standards and Guidelines — Principles specifying conditions or levels of environmental quality to be achieved.

Standard Component — The portion of the regulated commercial forest land on which crops of industrial wood can be grown and harvested with adequate protection of the forest resources under the usual provisions of the timber sale contract.

Stream Class — See Class I, II, III, and IV Streams.

Streamflow — The flow of water, generally with its suspended load, down a well-defined water course.

Streamside Management Unit (SMU) — The stream and an adjacent area where practices that might affect water quality, fish, and other aquatic resources are modified, as necessary, to meet water quality goals for each class of stream. The width of the area will vary with the management goals for each class of stream, characteristics of the stream and surrounding terrain, and type and extent of the planned activity. In the Mt. Baker-Snoqualmie National Forest, the area adjacent to wetlands and other bodies of water is termed a Wetland Management Unit (WMU). See “Class I, II, III, and IV streams.”

Stream Structure — The arrangement of logs, boulders, and meanders which modify the flow of water, thereby causing the formation of pools and gravel bars in streams. Generally, there is a direct relationship between complexity of structure and fish habitat. Complex structure is also an indication of watershed stability.

Stocking — The degree of occupancy of land by trees as measured by basal area or number of trees and as compared to a stocking standard; that is, the basal area or number of trees required to fully use the growth potential of the land.

Stumpage (stumpage value) — The value of timber as it stands uncut, in terms of an amount per unit of volume.

Substantive Comment — A comment that provides factual information, professional opinion, or informed judgment germane to the action being proposed.

Plan - Glossary

Successional Stage — A stage or recognizable condition of a plant community that occurs during its development from bare ground to climax.

Suitable — See “Timber Resource Land Suitability Classification.”

Suitable Forest Land — Land to be managed for timber production on a regulated basis. See “Timber Resource Land Suitability Classification.”

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.

Suppression — The process of extinguishing or confining a fire.

Surface Erosion — The detachment and transport of individual soil particles by wind, water, or gravity. Surface erosion can occur as the loss of soil in a fairly uniform layer across the land surface or in many small rills.

Sustained Yield of the Products and Services — The achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the National Forest System without impairment to the productivity of the land.

Talus Slope — A collection of fallen disintegrated material which has formed a slope at the foot of a steeper descending slope.

Tentatively Suitable — See “Timber Resource Land Suitability Classification.”

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

Thinning — See “Intermediate Cutting” and “Precommercial Thinning.”

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.

Till — Nonsorted, nonstratified sediment carried or deposited by a glacier.

Timber Resource Land Suitability Classification — National Forest System lands are classified according to the following definitions:

1. **Non-forest** — Land that has never supported forests and land formerly forested where use for timber production is precluded by development or other uses.
2. **Forest** — Land at least 10-percent stocked (based on crown cover) by forest trees of any size, or formerly having had such tree cover and not currently developed for non—forest use.

3. Unsuitable Forest Land (Not Suited) — Forest land that is not managed for timber production because (a) the land has been withdrawn by Congress, the Secretary, or the Chief; (b) the land is not producing or capable of producing crops of industrial wood; (c) technology is not available to prevent irreversible damage to soils, productivity, or watershed conditions; (d) there is no reasonable assurance that lands can be adequately restocked within 5 years after final harvest, based on existing technology and knowledge, as reflected in current research and experience; e) there is at present, a lack of adequate information to responses to timber management activities; or (f) timber management is inconsistent with or not cost efficient (not appropriate) in meeting the management requirements and multiple-use objectives specified in a Forest Plan land management alternative.
4. Tentatively Suitable Forest Land — Forest land that is producing or is capable of producing crops of industrial wood and (a) has not been withdrawn by Congress, the Secretary, or the Chief; (b) existing technology and knowledge is available to ensure timber production without irreversible damage to soils, productivity, or watershed conditions; (c) existing technology and knowledge, as reflected in current research and experience, provides reasonable assurance that adequate restocking can be attained within 5 years after final harvest; and (d) adequate information is available to project responses to timber management activities.
5. Suitable — Tentatively suitable forest land identified as appropriate for timber production in a Forest Plan land management alternative.
6. Commercial Forest (CFL) — Forest land that is producing or is capable of producing crops of industrial wood and (a) has not been withdrawn by Congress, the Secretary of Agriculture, or the Chief of the Forest Service; (b) existing technology and knowledge is available to ensure timber production without irreversible damage to soils productivity, or watershed conditions; and (c) where existing technology and knowledge, as reflected in current research and experience, provides reasonable assurance that adequate restocking can be attained within 5 years after final harvesting.

Timber Production — The purposeful growing, tending, harvesting, and regeneration of regulated crops of trees to be cut into logs, bolts, or other round sections for industrial or consumer use other than for fuelwood.

Timber Sale Program Quantity (TSPQ) — The volume of timber planned for sale during the first decade of the planning horizon. It includes the allowable sale quantity (chargeable volume) and any additional material (nonchargeable volume) planned for sale. The timber sale program quantity is usually expressed as an annual average for the first decade.

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

Topographic Class (Slope Class) — Divisions of the Forest important primarily for determining soil sediment outputs, tendency for soil erosion and slope failure, and difficulty in road construction and timber harvesting activities. The three classes defined in the Forest to reflect these concerns are:

- A — Gentle topography, less than 35% slope.
- B — Somewhat uneven topography with rock outcrops in less than 35% of the area. Steep slopes (35% to 80%).
- C — Rugged highly dissected topography with rock outcrops in 35% - 100% of the area. Steep slopes (50% to 90%).
Stream density greater than 5 miles per section.

See “Soil Stability Class.” The latter (three classes) were used in combination with each topographic class to develop coefficients such as soil sediment output caused by management activities.

Plan - Glossary

Tree Line — A loose term for the limit beyond which trees cannot or do not appear. The limiting factor is most commonly altitude or geographical latitude. A distinction may be drawn between tree line and timber line, the latter being roughly the limit of timber rather than isolated trees.

Turbidity — The cloudy condition caused by suspended solids in a liquid. See “Sediment.”

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.

Undeveloped Area — Portion of the National Forest that is essentially unroaded.

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. (35 CFR 219.3)

Unroaded — 1) RARE II roadless areas released by the Washington State Wilderness Act of 1984 from being considered for designation as wilderness during development of the initial Forest Plan; 2) In the Forest’s FORPLAN Model, an analysis area identifier which includes roadless areas defined in “1” above in addition to other unroaded areas in the Forest containing tentatively suitable forest land; 3) A term used to equal the sum of recreation use or carrying capacity from the primitive, semi-primitive nonmotorized, and semi-primitive motorized recreation opportunity spectrum areas outside wilderness.

Unsuitable Lands — See CFR 35 219.14. See “Timber Resource Land Suitability Classification, Unsuitable.”

Utility and Transportation Corridors — A strip of land designated for the transportation of energy, commodities, and communications. Examples are power transmission lines, pipelines, penstocks, water lines, etc. Transportation of minor amounts of power for short distances are not treated in the Forest Plan.

Utilization Standards — Standards guiding the use and removal of timber, which is measured in terms of diameter at breast height, top diameter inside the bark, and percent “soundness” of the wood.

Variety Class — A measure of visual diversity or inherent capability of the land to produce attractive scenery. There are three variety classes. See “Character Type.”

Class A - Distinctive — Refers to areas where features of the landscape are of unusual or outstanding visual quality. They are usually not common in the character type.

Class B - Common — Refers to areas where features contain variety in form, line, color, texture, or combinations thereof, but which tend to be common throughout the character type. These landscapes are the benchmark from which distinctive and minimal can be judged.

Class C - Minimal — Refers to areas where features have little change in form, line, color, or texture. Includes all areas not found under Classes A and B.

Vegetation Leave Area — Area of land in which vegetation is left undisturbed in order to provide shade and organic debris to streams, or to prevent the acceleration of natural erosion processes. No regulated timber harvest is planned in these areas.

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

Vertical Diversity — The diversity in a stand that results from the complexity of the aboveground structures of the vegetation; the more tiers of vegetation and/or the more diverse the species makeup, the higher the degree of vertical diversity. This concept is similar but not identical to “uneven-aged management;” each may influence the other. Application of even-aged management, for example, can be designed to accomplish vertical diversity objectives. See also “Horizontal Diversity.”

Viable Population — The number of individuals of a species required to ensure the long-term existence of the species in natural, self-sustaining populations adequately distributed throughout their region.

Viewshed — (Sometimes termed “Viewshed Corridor” or “Visual Corridor”). Viewsheds are the “seen” landscape visible to most Forest visitors from roads, trails, rivers, and recreation areas. Most are corridors, one-quarter to two miles wide. Viewsheds viewed from primary travel routes and use areas are “Sensitivity Level 1.” Viewsheds viewed from secondary travel routes and use areas are “Sensitivity Level 2.”

Visual Absorption Capacity (VAC) — An estimate of the relative ability of a landscape to accept management manipulations without significantly affecting its visual character, or the relative capacity of the land to absorb visual change. Rated as low, moderate, and high.

Visual Condition — The visual appearance of a landscape described in terms of the degree of alteration of the natural appearing landscape. Descriptive degrees of alteration are:

- 1 . Natural Appearing — Area appears untouched by man; changes are not visually evident.

Plan - Glossary

2. Slightly Altered — Changes may be noticed by the average visitor but do not attract attention. Natural appearance dominates minor disturbances.
3. Moderately Altered — Changes are easily noticed by the average visitor and may attract attention. Disturbances are apparent.
4. Heavily Altered — Changes are strong and obvious to the average visitor. Changes dominate the landscape but may resemble natural patterns when viewed from a distance of 3 to 5 miles. Disturbances are major.

Visual Corridor — See “Viewshed.”

Visual Quality Levels (VQL) — An inventoried measure of acceptable levels of modification of the visual resource. VQL’s are used in Forest planning as an indicator of social (visual) acceptability and as an input for management decisions. VQL’s become Visual Quality Objectives in the approved Forest Land Management Plan.

1. Preservation — Allows ecological changes only.
2. Retention — Human activities are not evident to the casual Forest visitor.
3. Partial Retention — Human activity may be evident, but must remain subordinate to the characteristic landscape.
4. Modification — Human activity may dominate the characteristic landscape, but must, at the same time, follow naturally established form, line, color, and texture. It should appear as a natural occurrence when viewed in foreground or middleground.
5. Maximum Modification — Human activity may dominate the characteristic landscape, but should appear as a natural occurrence when viewed as background.
6. Enhancement — A short-term management alternative which is done with the express purpose of increasing positive visual variety where little variety now exists.

Visual Quality Objectives (VQO) — See “Visual Quality Levels.”

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.

Wetlands — Areas that are inundated by surface water or groundwater with a frequency sufficient to support, and under normal circumstances does or would support, a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction (Executive Order 11990).

Wetland Management Unit (WMU) — See “Streamside Management Unit.”

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 human activity substantially unnoticeable; have outstanding opportunities for solitude or for a primitive and confined type of recreation; include at least 5,000 acres or are of sufficient size to make practical their preservation, enjoyment, and use in an unimpaired condition, and may contain features of scientific, educational, scenic, or historical value as well as ecologic and geologic interest.

Wild and Scenic Rivers — Those rivers or sections of rivers designated as such by congressional action under the 1968 Wild and Scenic Rivers Act, as supplemented and amended, or those sections of rivers designated as wild, scenic, or recreational by an act of the Legislature of the State or States through which they flow. Wild and Scenic Rivers may be classified and administered under one or more of the following categories:

1. Wild River Areas — Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.
2. Scenic River Areas — Those rivers or sections of rivers that are free of impoundments, with watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.
3. Recreational River Areas — Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

Wilderness Recreation Opportunity Spectrum — See “Recreation Opportunity Spectrum.” Wilderness ROS and their standards apply to all designated wilderness on the Forest. For specific direction regarding Alpine Lakes, consult the Alpine Lakes Area Land Management Plan.

Within each WROS Class there are Limits of Acceptable Change (LAC). LAC is a maximum limit of change allowed. Managers try to achieve the best conditions possible rather than allowing conditions to deteriorate until the threshold is reached. See “Limits of Acceptable Change.”

Plan - Glossary

1. **Transition** — This traileed class includes system trails that have a travelway worn to mineral soil over long distances, and is characterized by having a large proportion of day-users, often mixed in with overnight and long distance travelers. This area is usually adjacent to trailheads and extends into the wilderness a distance that is typically traveled in one day by a hiker. This class includes areas accessed by trail, around lakes, or other attractions used by people or pack stock, within the day-use influence area. The class extends at least 500 feet on either side of a trail; it may be wider around lakes or heavily used areas. The length of this trail class will be established for each trail depending on ease of travel, distance from trailhead outside wilderness, and destination attractions inside wilderness. Length will generally be 3 to 5 miles inside the wilderness boundary. If the day-use activity occurs entirely outside wilderness, the trail will have no Transition Class.
2. **Trailed** — This class includes all managed system trails. It extends beyond the Transition Class. This class extends at least 500 feet on either side of the trail but may be wider around lakes or heavily used areas.
3. **General Trailless** — This class includes areas not falling into the other classes. It attracts very low use because of a relative lack of trails or destination spots. The area is unmodified; user-made trails are not encouraged, but they may exist. If obvious user-made trails become well established, or are causing resource damage, consideration will be given to their reconstruction in order to protect the wilderness resource from further damage. Reclassification from general trailless to traileed requires a supplement of the Forest Plan, which shall include full public involvement. This class is available for new trail construction or relocation of existing trails to protect resources or meet objectives by dispersing use. If this should occur, the trail will only be constructed to no higher than “more difficult” or “most difficult” standards.
4. **Dedicated Trailless** — This class is managed forever trailless; user-made trails are not permitted. It may include popular attractions accessed only by cross-country travel. Human impact and influence is, by design, minimal; therefore user restrictions may be necessary to insure that trailless experiences remain. Dedicated Trailless areas should be of a size that will allow for a meaningful experience and can be reasonably protected for the experiences and remoteness identified. Generally the class is at least 1,000 acres in size and contains whole drainages or basins out of sight and sound of trails or areas outside the wilderness.
5. **Special Areas** — The intent of this class is to provide for significant changes in standards or other management guidelines for unique areas. Areas that qualify for Special Area designation include congressionally acknowledged areas, areas of significant cultural or historic value, areas with special considerations, and areas with limited management options to deal with unique situations. Areas do not qualify for this class for administrative convenience in dealing with overuse. The class is rare and will not exist in many wildernesses.

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

Wildland — Uncultivated land, other than fallow, virtually uninfluenced by human activity. It may be neglected altogether or maintained for such purposes as wood or forage production, wildlife habitat, recreation, or protective plant cover.

Wildlife Fish User Day (WFUD) — One WFUD consists of 12 hours of recreation that is the result of fish or wildlife, such as hunting, fishing, birdwatching, etc.

Will — Verb used in the Management Prescriptions, Proposed Forest Plan. Is not restrictive; applies only to a statement of future condition or an expression of time. Not used in the place of “shall.”

Windfall — A tree thrown or the stem or other parts (such as branches, foliage, or fruit) broken off or blown down by the wind.

Wood Residue — The residual wood remaining as a result of timber cutting, other vegetation disturbing activity, storms, fire, or other natural event. It includes any unutilized woody material. See “Slash” and “Residue Utilization.”

Yarding — The moving of logs from the stump where cut to a central concentration area or landing. See “Logging Systems.”

Yield Tables — Tables that estimate the level of outputs that would result from implementing a particular activity. Usually referred to in conjunction with FORPLAN input or output. Yield tables can be developed for timber volumes, range production, soil and water outputs, and other resources.