

# GLOSSARY

## A

**Access Management Plan** – The development of travel management policies that consider the development, maintenance, and protection of all forest resources.

**Affected Environment** – The biological, social, economic, and physical aspects of the environment that will or may be changed by proposed actions.

**Alternative** – A combination of management prescriptions applied in specific amount and locations to achieve a desired management emphasis as expressed in goals and objectives. One of several policies, plans, or projects proposed for decision making. An alternative need not substitute for another in all respects.

**Anadromous fish** – Those species of fish that mature in the sea and migrate into streams to spawn (e.g., salmon and steelhead trout).

**Analysis Area** – A delineated area of land subject to analysis of (1) responses to proposed management practices in the production, enhancement, or maintenance of forest and rangeland outputs and environmental quality objectives; and (2) economic and social impacts.

**Aquatic (and riparian) health** — Aquatic and riparian habitats that support animal and plant communities that can adapt to environmental changes and follow natural evolutionary and biogeographic processes. Healthy aquatic and riparian systems are resilient and recover rapidly from natural and human disturbance. They are stable and sustainable, in that they maintain their organization and autonomy over time and are resilient to stress. In a healthy aquatic/riparian system there is a high degree of connectivity from headwaters to downstream reaches, from streams to floodplains, and from subsurface to surface. Floods can spread into floodplains, and fish and wildlife populations can move freely throughout the watershed. Healthy aquatic and riparian ecosystems also maintain long-term soil productivity. Mineral and energy cycles continue without loss of efficiency.

**Available water** — The amount of water in the soil that can be readily absorbed by plant roots.

## B

**Biological Diversity** – (1) The distribution and abundance of plant and animal communities. (2) The variety of life forms and processes, including a complexity of species, communities, gene pools, and ecological functions.

**Biophysical Environment or Bioenvironment** – The interaction of climatic factors (moisture and temperature) and soil conditions on the expression of vegetation types and associated habitats. Climatic and soil conditions that result in similar successional pathways, disturbance processes and associated vegetative/habitat characteristics are referred to as a biophysical environment.

**Board Foot** – A unit of measurement represented by a board one foot square and one inch thick.

## C

**Canopy** — In a forest, the branches from the one or more uppermost layers of trees; on rangeland, the vertical projection downward of the aerial portion of vegetation.

**Categorical Exclusion (CE)** – Routine, administrative, maintenance, and other actions, established by the Chief of the Forest Service, which normally do not individually or cumulatively have a significant effect on the quality of the human environment and, therefore, may be categorically excluded from documentation in an EIS or EA unless scoping indicates extraordinary circumstances.

**Canopy closure** — The amount of ground surface shaded by tree canopies as seen from above. Used to describe how open or dense a stand of trees is, often expressed in 10 percent increments.

**Channel (stream)** — The deepest part of a stream or riverbed through which the main current of water flows.

**Closure** – A road management term indicating the road cannot be used by motorized traffic. This limitation can be accomplished by regulation, barricade, or blockage devices. The road can be available for emergency use or permitted use such as firewood cutting during dry periods.

**Competition** — An interaction that occurs when two or more individuals make demands of the same resources that are in short supply.

**Connectivity** — The arrangement of habitats that allows organisms and ecological processes to move across the landscape; patches of similar habitats are either close together or linked by corridors of appropriate vegetation. The opposite of a fragmented condition.

**Corridor (landscape)** — Landscape elements that connect similar patches of habitat through an area with different characteristics. For example, streamside vegetation may create a corridor of willows and hardwoods between meadows or through a forest.

**Cover** — (1) Trees, shrubs, rocks, or other landscape features that allow an animal to partly or fully conceal itself. (2) The area of ground covered by plants of one or more species. The four levels of cover as defined for elk are: *satisfactory cover*; *marginal cover*; *hiding cover*; and *thermal cover*.

**Cover type** — A vegetation classification depicting a genus, species, group of species, or life form of tree, shrub, grass, or sedge. In effect the present vegetation of an area.

**Crown** — The part of a tree containing live foliage; treetops.

**Cultural Resource** — The physical remains of human activity (artifacts, ruins, burial mounds, petroglyphs, etc.) and conceptual content or context (as a setting for legendary, historic, or prehistoric events, as a sacred area of native peoples, etc.) of an area of prehistoric or historic occupation.

## D

**Decommissioning** — Activities to permanently remove a road from the transportation system. The management objective of the activities is to restore the hydrologic function. These activities include, as needed: the removal of drainage structures such as culverts, re-contouring cut and fill slopes, subsoiling, and revegetating the old road beds.

**Density (stand)** — The number of trees growing in a given area, usually expressed in terms of trees per acre.

**Desired Condition** — (1) A portrayal of the land or resource conditions that are expected to result if goals and objectives are fully achieved. (2) A description of the landscape as it could reasonably be expected to appear at the end of the planning period if the plan goals, objectives, standards, and guidelines for that landscape are fully achieved.

**Detrimental soil impacts** — Soil erosion, displacement, compaction, puddling, or burning that exceeds certain thresholds. For instance, displacement is a detrimental soil impact only if more than 50% of the topsoil or humus-enriched A-horizon is removed from an area of 100 square feet or more, which is at least 5 feet in width. A Forest Plan standard limits the amount of detrimental soil impacts to 20% of an activity area.

**Diameter at Breast Height (dbh)** — The diameter of a tree measured 4-1/2 feet above the ground.

**Disturbance** — Refers to events that alter the structure, composition, or function of terrestrial or aquatic habitats. Natural disturbances include, among others, drought, floods, wind, fires, wildlife grazing, and insects and diseases. Human-caused disturbances include, among others, actions such as timber harvest, livestock grazing, roads, and the introduction of exotic species

**Downed wood** — A tree or part of a tree that is dead and lying on the ground.

**Duff** — The partially decomposed organic material of the forest floor that lies beneath freshly fallen leaves, needles, twigs, stems, bark, and fruit.

## E

**Ecosystem** — A complete, interacting system of living organisms and the land and water that make up their environment; the home places of all living things, including humans.

**Effects** — Environmental changes resulting from a proposed action. Included are direct effects, which are caused by the action and occur at the same time and place, and indirect effects, which are caused by the action and are later in time or further removed in distance, but which are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water and other natural systems, including ecosystems.

**Environment** — The combination of external physical, biological, social, and cultural conditions affecting the growth and development of organisms and the nature of an individual or community.

**Erosion** — The wearing away of the land surface or stream channel by running water, wind, ice, gravity, or other geological activities; can be accelerated or intensified by human activities that reduce the ground cover of soils or that concentrate running water.

## F

**Fire-dependent systems** — Forests, grasslands, and other ecosystems historically composed of species of plants that evolved with and are maintained by fire regimes.

**Fire intensity** — a term used to describe the rate at which a fire produces thermal energy in one square foot along a flaming front of fire; influenced by the amount of fuel available, local weather conditions, and the topography of the burn site.

**Fire-intolerant** — Species of plants that do not grow well with or that die from the effects of too much fire. Generally these are shade-tolerant species.

**Fire regime** — The characteristics of fire in a given ecosystem, such as the frequency, predictability, intensity, and seasonality of fire.

**Fire return interval** — The average time between fires in a given area.

**Fire Severity** — The degree to which a site has been altered or the successional processes disrupted by fire. Fire severity, loosely, is a product of fire intensity and residence time. Depending on the amount and condition of organic material in them, burned areas are described as belonging to one of three fire severity categories: *light-severity*, *moderate-severity*, or *high-severity*.

**Fire-tolerant** — Species of plants that can withstand certain frequency and intensity of fire. Generally these are shade-intolerant species.

**Flame Length** — The visible measurable indicator of fireline intensity. It is the length of a flame at the flaming front of a fire.

**Floodplain** — The portion of river valley or level lowland next to streams, which is covered with water when the river or stream overflows its banks at flood stage.

**FOFEM** — First Order Fire Effects Model. The model that helps determine mortality or survivability of plant and tree species based on effects of fire from scorch height to the crown or cambium kill under the bark. There is no model for residual burn time to ground root systems from burn out of large woody material, but the program does give an estimate for soil heating for time-temperature profile at specific depths.

**Forage** — Vegetation (both woody and non-woody) eaten by animals, especially grazing and browsing animals.

**Forbs** — Any herbaceous plant other than true grasses, sedges, and rushes.

**Forest health** — The condition in which forest ecosystems sustain their complexity, diversity, resiliency, and productivity to provide for specified human needs and values. It is a useful way to communicate about the current condition of the forest, especially with regard to resiliency, a part of forest health that describes the ability of the ecosystem to respond to disturbances. Forest health and resiliency can be described, in part, by species composition, density, and structure.

**Forest plan (Forest Land and Resource Management Plan)** — A document that guides natural resource management and establishes standards and guidelines for a national forest; required by the National Forest Management Act.

**Fragmentation (habitat)** — The break-up of a large land area (such as a forest) into smaller patches isolated by areas converted to a different land type. The opposite of connectivity.

**Fuel (fire)** — Dry, dead parts of trees, shrubs, and other vegetation that can burn readily.

**Fuel ladder** — Vegetative structures or conditions, such as low-growing tree branches, shrubs, or smaller trees, that allow fire to move vertically from a surface fire to a crown fire.

**Fuel load** — The dry weight of combustible materials per unit area; usually expressed as tons per acre.

**Fuel Model** — The combination of live and dead fuel loadings and arrangement that is used in conjunction with weather and topography inputs to model the fire behavior of a surface fire.

## G

**Graminoid** — Grass like plants such as grasses and sedges.

**Ground fire** — A fire that burns the organic material in the soil layer and the decayed material or peat below the ground surface.

## H

**Habitat** — A place that provides seasonal or year-round food, water, shelter, and other environmental conditions for an organism, community, or population of plants or animals.

**Habitat type** — A group of plant communities having similar habitat relationships.

**Hard Snag** – A snag composed primarily of sound wood, particularly sound sapwood that is generally unmerchantable.

**Harvest** — (1) Felling and removal of trees from the forest; (2) removal of game animals or fish from a population, typically by hunting or fishing.

**Headwaters** — Beginning of a watershed; un-branched tributaries of a stream.

**Historic Range of Variability (HRV)** — The natural fluctuation of ecological and physical processes and functions that would have occurred during a specified period of time. Refers to the range of conditions that are likely to have occurred prior to settlement of the project area by Euro-Americans (approximately the mid 1800s), which would have varied within certain limits over time. HRV is discussed in this document only as a reference point, to establish a baseline set of conditions for which sufficient scientific or historical information is available to enable comparison to current conditions.

**Hydrophobic Soil** – Soil that does not readily absorb water. Hydrophobic soil is highly erodible. It is sometimes formed during severe fire on coarse textured soils. Hydrophobic soil usually returns to a non-hydrophobic condition after one or two winters.

## I

**Indicator species** — A species that is presumed to be sensitive to habitat changes; population changes of indicator species are believed to best indicate the effects of land management activities.

**Interdisciplinary Team (IDT)** – A group of individuals with different training assembled to solve a problem or perform a task. The team is assembled out of recognition that no one scientific discipline is sufficiently broad to adequately solve the problem. Through interaction, participants bring different points of view to bear on the problem.

**Intermittent stream** — A stream that flows only at certain times of the year when it receives water from other streams or from surface sources such as melting snow.

## L

**Landscape** — All the natural features such as grass-lands, hills, forest, and water, which distinguish one part of the earth's surface from another part; usually that portion of land which the eye can comprehend in a single view, including all its natural characteristics.

**Large downed wood** — Logs on the forest floor with a large end diameter of at least 21 inches.

**Large woody debris** — Pieces of wood that are of a large enough size to affect stream channel morphology.

**Late and Old Structural (LOS) Forest** — (a) *Single stratum with large tree (SSWL) forest* refers to mature forest characterized by a single canopy layer consisting of large or old trees. Understory trees are often absent, or present in randomly spaced patches. It generally consists of widely spaced, shade-intolerant species, such as ponderosa pine and western larch, adapted to a low severity, high frequency fire regime. (b) *Multi-stratum with large tree (MSWL) forest* refers to mature forest characterized by two or more canopy layers with generally large or old trees in the upper canopy. Understory trees are also usually present, as a result of a lack of frequent disturbance to the understory. It can include both shade-tolerant and shade-intolerant species, and is generally adapted to a mixed fire regime of both high severity and low severity fires. Other characteristics of old forests include: variability in tree size; increasing numbers of snags and coarse woody debris; increasing appearance of decadence, such as broken tops, sparse crowns, and decay in roots and stems; canopy gaps and understory patchiness; and old trees relative to the site and species.

**Litter** — The uppermost layer of organic debris on the soil surface, which is essentially the freshly fallen or slightly decomposed vegetation material such as stems, leaves, twigs, and fruits.

## M

**Management Area** – An area with similar management objectives and a common management prescription.

**Management direction** — A statement of goals and objectives, management prescriptions, and associated standards and guidelines for attaining them.

**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 affected environment; reducing or eliminating the impact by preservation and maintenance operations during the life of the action.

## **N**

**National Environmental Policy Act (NEPA)** – An act which encourages productive and enjoyable harmony between humans and their environment; promotes efforts to prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of humanity; enriches the understanding of the ecological systems and natural resources to the nation, and establishes a Council on Environmental Quality (CEQ).

**Non-Wildland Urban Interface (non-WUI)** – The area outside a line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels.

## **O**

**Old Growth** – For all National Forests in the Pacific Northwest Region, an old growth stand is defined as any stand of trees 10 acres or greater generally containing the following characteristics:

- a. Stands contain mature and over-mature trees in the overstory and are well into the mature growth stage (see Handbook of Terminology, Society of American Foresters)
- b. Stands will usually contain a multi-layered canopy and trees of several age classes.
- c. Standing dead trees and down material are present.
- d. Evidence of human activities may be present but may not significantly alter the other characteristics and would be a subordinate factor in a description of such a stand.

**Ongoing actions** — Those actions that have been implemented, or have contracts awarded or permits issued.

## **P**

**Prescribed fire** — Intentional use of fire under specified conditions to achieve specific management objectives.

**Prescription** — A management pathway to achieve a desired objective(s).

**Productivity** — (1) *Soil productivity*: the capacity of a soil to produce plant growth, due to the soil's chemical, physical, and biological properties (such as depth, temperature, water-holding capacity, and mineral, nutrient, and organic matter content). (2) *Vegetative productivity*: the rate of production of vegetation within a given period. (3) *General*: the innate capacity of an environment to support plant and animal life over time.

**Proper Functioning Condition** – Riparian wetland areas are functioning properly when adequate vegetation, landform, or large woody debris is present to dissipate stream energy associated with high water flows, thereby reducing erosion and improving water quality; filter sediment, capture bedload, and aid floodplain development; improve flood-water retention and ground-water recharge; develop root masses and stabilize stream banks against cutting action; develop diverse ponding and channel characteristics to provide the habitat and the water depth, duration, and temperature necessary for fish production, waterfowl breeding, and other uses, and support greater biodiversity.

**Proposed action** — A proposal by a federal agency to authorize, recommend, or implement an action.

## **R**

**Recreation Opportunity Spectrum (ROS)** – The Forest Service developed the Recreation Opportunity Spectrum (ROS) system to help identify, quantify, and describe the variety of recreational settings available in National Forests. The ROS system provides a framework for planning and managing recreation resources. The ROS settings are classified on a scale ranging from primitive to urban. Seven elements are used to determine where the setting belongs on the scale:

- **Visual Quality** – the degree of apparent modification of the natural landscape.
- **Access** – the mode by which activities are pursued and how well users can travel to or within the setting.

- **Remoteness** – the extent to which individuals perceive themselves removed from the sight and sounds of human activity.
- **Visitor Management** - the degree and appropriateness of how visitor actions are managed and serviced.
- **On-Site Recreation Development** - the degree and appropriateness of recreation facilities provided within the setting.
- **Social Encounters** - the degree of solitude or social opportunities provided.
- **Visitor Impacts** - the degree of impact on both the attributes of the setting and other visitors within the setting.
- Based on the seven elements, the Forest Service assigns one of six ROS settings zones to all Forest Service land; four of these apply to the project area.
- **Roaded Modified:** A natural environment substantially modified, particularly by vegetation and landform alterations. There is strong evidence of roads and /or highways. Frequency of contact is low to moderate.
- **Roaded Natural:** A natural-appearing environment with moderate evidence of the sights and sounds of humans. Such evidence usually harmonizes with the natural environment. Interaction between users may be moderate to high with evidence of other users prevalent. Motorized use is allowed.
- **Semi-Primitive Non-Motorized:** A natural or natural-appearing environment of moderate to large size. Concentration of users is low, but there is often evidence of other users. Use of local roads for recreational purposes is not allowed.
- **Semi-Primitive Motorized:** A natural or natural-appearing environment of moderate to large size. Interaction between users is low, but there is often evidence of other users. The opportunity exists to use motorized equipment.

**Reforestation** — Treatments or activities that help to regenerate stands of trees after disturbances such as harvest or wildfire. Typically, reforestation activities include preparing soil, controlling pests, and planting seeds or seedlings.

**Regeneration** — The process of establishing new plant seedlings, whether by natural means or artificial measures (planting).

**Rehabilitate** — To repair and protect certain aspects of a system so that essential structures and functions are recovered, even though the overall system may not be exactly as it was before.

**Resilient, resilience, resiliency** — (1) The ability of a system to respond to disturbances. Resiliency is one of the properties that enable the system to persist in many different states or successional stages. (2) In human communities, refers to the ability of a community to respond to externally induced changes such as larger economic or social forces.

**Restoration** — Holistic actions taken to modify an ecosystem to achieve desired, healthy, and functioning conditions and processes. Generally refers to the process of enabling the system to resume acting or continue to act following disturbance as if the disturbances were absent. Restoration management activities can be either active (such as control of noxious weeds, thinning of over-dense stands of trees, or redistributing roads) or more passive (more restrictive, hands-off management direction that is primarily conservation oriented).

**Riparian area** — Area with distinctive soil and vegetation between a stream or other body of water and the adjacent upland; includes wetlands and those portions of floodplains and valley bottoms that support riparian vegetation.

**Riparian Habitat Conservation Areas (RHCAs)** – Portions of watersheds where riparian-dependent resources receive primary emphasis, and management activities are subject to specific standards and guidelines. Riparian Habitat Conservation Areas include traditional riparian corridors, wetlands, intermittent streams, and other areas that help maintain the integrity of aquatic ecosystems by (1) influencing the delivery of coarse sediment, organic matter, and woody debris to streams, (2) providing root strength for channel stability, (3) shading for stream, and (4) protecting water quality.

**Road Density** – The measure of the degree to which the length of road miles occupies a given land area.

## S

**Sawtimber** – Trees suitable in size and quantity for producing logs that can be processed into lumber.

**Scenery Management System** – Management guidelines based on the premise that land management activities (including construction of facilities) should not contrast with the existing natural appearing landscape. Within a framework of regional landscape, character types, form, line, color, and texture should be used to make activities and structures “fit” within landscapes.

**Scenic Integrity Objectives (SIOs)** – The degree of direct human-caused deviations in the landscape, such as road construction, timber harvesting, or activity debris. Indirect deviations, such as landscape created by human suppression of the natural role of fire, are not included. The level to which an area meets its SIOs is indicated by the ratings **Very High, High, Moderate, Low, Very Low, or Unacceptably Low**.

**Scoping** — The early stages of preparation of an environmental impact statement/environmental assessment, used to solicit public opinion, receive comments and suggestions, and determine the issues to be considered in the development and analysis of a range of alternatives. Scoping may involve public meetings, telephone conversations, mailings, letters, or other contacts.

**Sediment** — Solid materials, both mineral and organic, in suspension or transported by water, gravity, ice, or air; may be moved and deposited away from their original position and eventually will settle to the bottom.

**Sensitive Species** – Those species which (1) have appeared in the Federal Register as proposals for classification and are under consideration for official listing as Endangered or Threatened; (2) are on an official State list; or (3) are recognized by the Regional Forester to need special management in order to prevent the need for their placement on Federal or State lists.

**Seral** — Refers to the stages that plant communities go through during succession. Developmental stages have characteristic structure and plant species composition. Early seral refers to plants that are present soon after a disturbance or at the beginning of a new successional process (such as seedling or sapling growth stages in a forest); mid seral in a forest would refer to pole or medium sawtimber growth stages; late or old seral refers to plants present during a later stage of plant community succession (such as mature and old forest stages).

**Seral stage** — The developmental phase of a forest stand or rangeland with characteristic structure and plant species composition.

**Shade-intolerant** — Species of plants that do not grow well in or die from the effects of too much shade. Generally these are fire-tolerant species.

**Shade-tolerant** — Species of plants that can develop and grow in the shade of other plants. Generally these are fire-intolerant species.

**Shallow soils** – : "scab" soils - highly and very highly erodible, unforested, shallow, rocky soils supporting low amounts of ground cover

**Silviculture** — The practice of manipulating the establishment, composition, structure, growth, and rate of succession of forests to accomplish specific objectives.

**Site** — A specific location of an activity or project, such as a campground, a lake, or a stand of trees to be harvested.

**Snag** — A standing dead tree, usually larger than five feet tall and six inches in diameter at breast height. Snags are important as habitat for a variety of wildlife species and their prey.

**Soil** — The earth material that has been so modified and acted upon by physical, chemical, and biological agents that it will support rooted plants.

**Soil disturbance** — Displacement or compaction (or other disturbance) of soil, that may or may not be severe enough to count as detrimental soil impact.

**Stand** — A group of trees in a specific area that is sufficiently alike in composition, age, arrangement, and condition so as to be distinguishable from the forest in adjoining areas.

**Stand density** — Refers to the number of trees growing in a given area, usually expressed in trees per acre.

**Stand Structure** — The size and arrangement, both vertically and horizontally, of vegetation. Forested vegetation is classified into 7 different structural stages:

- **Stand Initiation** - When land is occupied by trees following a stand-replacing disturbance.
- **Stem Exclusion Open Canopy** – Forested areas where the occurrence of new trees is predominantly limited by moisture.
- **Stem Exclusion Closed Canopy** – Forested areas where the occurrence of new trees is predominately limited by light.
- **Understory Reinitiation** – When a second generation of trees is established under an older, typically seral, overstory.
- **Young Forest Multi-Strata** – Stand development resulting from frequent harvest or lethal disturbance to the overstory.

- **Old Forest Multi-Strata** – Forested areas lacking frequent disturbance to understory vegetation.
- **Old Forest Single-Stratum** – Forested areas resulting from frequent non-lethal prescribed or natural underburning, or other management.

The abundance and distribution of these forest structures provides the basis for evaluation of the historic range of variability (HRV) of structural conditions providing insight to the interaction of disturbance processes and associated structural and compositional conditions of forested landscapes.

**Structure** — The size and arrangement, both vertically and horizontally, of vegetation.

**Structural stage** — A stage of development of a vegetation community that is classified on the dominant processes of growth, development, competition, and mortality. See Stand Structure.

**Subwatershed** — A drainage area, equivalent to a 6th-field Hydrologic Unit Code (HUC). Hierarchically, subwatersheds (6th-field HUC) are contained within watershed (5th-field HUC), which in turn contained within a subbasin (4th-field HUC). The size of subwatersheds has recently been redefined as 10,000 to 40,000 acres; formerly size of watersheds was 5,000 to 20,000 acres. The former size was used in this document. Subwatersheds are shown graphically in Figure 3, Map Section.

**Surface Fire** – Fire that burns surface litter, other loose debris of the forest floor, and small vegetation.

## T

**Terrestrial** — Pertaining to the land.

**Terrestrial communities** — Groups of cover types with similar moisture and temperature regimes, elevational gradients, structures, and use by vertebrate wildlife species.

**Thermal cover** — Cover used by animals for protection against weather.

**Thinning** — An operation to remove stems from a forest for the purpose of reducing fuel, maintaining stand vigor, regulating stand density/composition, or for other resource benefits. Although thinning can result in commercial products, thinning generally refers to non-commercial operations.

**Threatened species** — Species listed under the Endangered Species Act that are likely to become endangered within the foreseeable future through-out all or a significant portion of their range.

## U

**Underburn** — To burn by a surface fire that can consume ground vegetation and ladder fuels.

**Understory** — Plants that grow beneath the canopy of other plants. Usually refers to grasses, forbs, and low shrubs under a tree or shrub canopy.

**Uneven-aged stand** — Stand of trees in which there are considerable differences in the ages of individual trees.

**Upland** — The portion of the landscape above the valley floor or stream.

## V

**Viability** — In general, viability means the ability of a population of a plant or animal species to persist for some specified time into the future. For planning purposes, a *viable population* is one that has the estimated numbers and distribution of reproductive individuals to ensure that its continued existence will be well distributed in the planning area.

**Visual Quality Objectives (VQOs)** — A desired level of management based on physical and sociological characteristics of an area. Refers to the degree of acceptable alteration of the characteristic landscape.

- **Preservation**—Allows only ecological changes. Management activities, except for very low visual impact recreation facilities, are prohibited. This objective applies to specially classified areas, including wilderness.
- **Retention**—Provides for management activities that are not visually evident. Management activities are permitted, but the results of those activities on the natural landscape must not be evident to the average viewer.
- **Partial Retention**—Management activities may be evident to the viewer but must remain visually subordinate to the surrounding landscape.

- **Modification**—Management activities may visually dominate the natural surrounding landscape but must borrow from naturally established form, line, color, and texture.
- **Maximum Modification**—Land management activities can dominate the natural landscape to greater extent than in the modification objective, except as viewed from background when visual characteristics must be those of natural occurrences within the surrounding area.

## W

**Watershed** — (1) The region draining into a river, river system, or body of water. (2) a watershed also refers specifically to a drainage area of approximately 50,000 to 100,000 acres, which is equivalent to a 5th-field Hydrologic Unit Code (HUC). Hierarchically, subwatersheds (6th-field HUC) are contained within a watershed (5th-field HUC), which in turn is contained within a subbasin (4th-field HUC).

**Wetland** — In general, an area soaked by surface or groundwater frequently enough to support vegetation that requires saturated soil conditions for growth and reproduction; generally includes swamps, marshes, springs, seeps, bogs, wet meadows, mudflats, natural ponds, and other similar areas. Legally, federal agencies define wetlands as possessing three essential characteristics: (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. The three technical characteristics specified are mandatory and must all be met for an area to be identified as a wetland. *Hydrophytic vegetation* is defined as plant life growing in water, soil, or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content. *Hydric soils* are defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic (without oxygen) conditions in the upper part of the soil profile. Generally, to be considered a hydric soil, there must be saturation at temperatures above freezing for at least seven days. *Wetland hydrology* is defined as permanent or periodic inundation, or soil saturation to the surface, at least seasonally.

**Whole Tree Yarding** – No cutting of limbs and tops before yarding of the tree out of the unit during salvage operations. This does not mean that there will not be limbs and tops left out in the unit due to breakage since the trees are dead.

**Wildfire** — A human or naturally caused fire that does not meet land management objectives.

**Wildland Urban Interface (WUI)** – The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels.

## Y

**Yarding** -- the hauling of felled timber to the landing or temporary storage site from where trucks (usually) transport it to the mill site. Yarding methods include cable yarding, ground skidding, and aerial methods such as helicopter yarding.