

Appendix B: Glossary

Wildlife Habitat Definitions _____

Late-Successional Forest - Forest seral stages that include both old-growth and mature age classes that are defined below. There is a clear distinction between habitat provided by old-growth stands when compared to mature stands:

- **Old-Growth** – A forest stand usually at least 180-220 years old with moderate to high canopy closure; a multilayered, multispecies canopy dominated by large overstory trees; high incidence of large trees, some with broken tops and other indications of old and decaying wood; numerous snags; and heavy accumulations of wood, including large logs on the ground. Old-growth stands provide **high** quality nesting/roosting habitat for the northern spotted owl.
- **Mature Stand** – A mappable (>10 acres) stand of trees for which the annual rate of growth has peaked; generally greater than 80 years old but not yet old-growth. Mature stands generally contain trees with a smaller average diameter, less age class variation, and less structural complexity than old-growth stands of the same forest type. Dense and moderately dense mature conifer stands provide **moderate** quality nesting/roosting and foraging habitat respectively for the northern spotted owl. Mature forest with less than moderate canopy closure does not necessarily provide habitat for species such as the northern spotted owl but often provides connectivity between owl nesting/roosting/foraging habitat.

Other Terms Commonly Used in Forest Service Land Management ____

Activity Fuels: Fuels generated by any number of timber harvesting methods.

APOO: Aquatic Period of Operation.

Basal Area: The area of the cross section of a tree stem including the bark, near its base, generally at breast height, or 4 feet above the ground.

Burn Concentrations: See Jackpot burning.

Cable Logging (yarding): A harvest technology where cut logs are partially or fully suspended above the ground and transported to a landing.

Canopy: The more or less continuous cover of leaves and branches collectivity formed by the crowns of adjacent trees in a stand forest.

Canopy Closure: The degree to which the canopy (forest layers above ones head) blocks sunlight or obscures the sky. It can only be accurately determined from measurements taken under the canopy, as openings in the branches and crowns must be accounted for.

Decommissioned Road: These roads are not needed for future use and are taken off the FS transportation system once the decommissioning activities have been implemented and earth berm barriers installed. However, the roads are still tracked by the Forest Service database. The goal is to remove those elements of a road that reroute hillslope drainage and present slope stability hazards by re-establishing natural drainage to the extent practicable.

Dozer Line: To rearrange, gather and push aside fuels with a bulldozer. This provides a break in the continuity of fuels, which helps prevent fire from spreading outside of the unit. Some fuels and the duff layer would remain on the forest floor in these areas.

Duff Layer: The layer of loosely compacted debris underlying the litter layer on the forest floor.

End lining: Removing harvest trees by winching with a rubber tired or tracked skidder. Often used when trees must be moved a short distance over steep (over 35%) slopes or sensitive areas (Riparian Reserves).

Equivalent Road Acre (ERA): A unit of measure used in cumulative watershed impact analyses, which represents the equivalent disturbance of one acre of roaded area. Disturbances primarily include soil exposure and compaction.

Erosion Hazard Rating: A relative rating of the potential for the loss of soil due to sheet and rill erosion from a specific site. Commonly used to address erosion response expected from a given land management activity. Ratings are the result of a cumulative analysis of soil type, topography, climate, and vegetative and protective factors.

Fuel Break: A strip of land strategically placed where hazardous fuels have been replaced with less burnable materials. Fuel breaks divide fire-prone areas into smaller parcels for easier fire control and provide access for firefighting.

Fuel: Any material capable of sustaining or carrying a forest fire, usually natural material both live and dead.

Fuel Loading: The amount of combustible material present per unit of area.

Fuel Management Zone: A specified area of land where natural fuels are either removed or manipulated in order to help slow or stop the spread of wildfire.

Hand Line: To cut and remove understory vegetation to bare mineral soil. This width can be determined on site during a wildfire or during project planning, and is based on current and expected fire behavior. Trenches are constructed on the down hill side of the unit on steep slopes to prevent rolling material from crossing fire lines.

Hand pile: Piling of fuel using only human laborers.

Helicopter Logging (yarding): Use of helicopters to transport logs from where they are felled to a landing.

Jackpot Burning: A technique of applying fire to target fuels, which ignites only concentrations of burnable materials within the unit being treated.

Landing: Any place on or adjacent to a logging site where logs are assembled for further transport.

Lop and Scatter: Cutting, lopping and scattering residual vegetation. Usually to a height of less than 18 inches above the ground.

Management Direction: A statement of goals and objectives and the associated management prescriptions and standards and guidelines for attaining them.

Mass Wasting: A general term for the dislodgement and downslope transport of soil and rock material under the direct application of gravity.

Mastication: To mechanically grind up forest fuels such as brush, branches and small diameter trees into small pieces, which are then left on site. This would occur on slopes < 35% inside plantations and fuel buffers.

Matrix: Federal lands outside of reserves, withdrawn areas, managed late-successional reserves, and adaptive management areas.

Obliteration: Road removal where no presence of the road remains. All drainage structures are removed and the road is returned to the natural slope.

Overstory: That portion of trees in a forest, with more than one roughly horizontal layer of foliage, which forms the upper or uppermost layer.

Regeneration Harvest: Applies to the logging stands of rotation age or greater; and of stands below rotation age which cannot economically be held any longer because of poor stocking, health, thrift, quality, or composition. These cuttings are intended to replace the existing stands with a new stand. See also green tree retention.

Residual Stand: Trees that remain standing after some event such as thinning.

Riparian Reserve: A land designation where riparian-dependant resources receive primary emphasis and where special standards and regulations apply.

Sanitation/Salvage: The removal of dead or damaged trees, or trees susceptible to insect and disease attack such as intermediate and suppressed trees, essentially to prevent the spread of pest or pathogens and to promote forest health.

Silviculture: The science of cultivating forest crops.

Silvicultural Prescription: A professional plan for controlling the establishment, composition, constitution, and growth of forests.

Silvicultural System: Establishing, growing, and tending of forests.

Skid Trail: A path created to drag logs to a landing.

Skyline: See cable logging.

Snag: A standing dead tree from which the leaves and most of the branches have fallen.

Stand: A community of trees occupying a specific area sufficiently uniform in composition, age arrangement and condition distinguishable as a silvicultural or management unit.

Stocking Level: In a forest, a subjective indication of the number of existing trees as compared to the desirable number for maximum productivity of wood.

Temporary Road: Roads authorized by contract, permit, lease, and/or emergency operation. These roads are not part of the FS transportation system, nor maintained for long-term use. Temporary road removal and site stabilization is required after approved use prior to the rainy season each year or when the facility is no longer needed, whichever is earliest.

Thinning: The selective removal of trees, primarily undertaken to improve the growth rate or health of remaining trees. Overcrowded trees are under competitive stress from their neighbors. Thinning may be done to increase the resistance of the stand to environmental stress such as drought, insect infestation or extreme temperature.

Tractor Pile: Piling fuels by the use of a bulldozer, most often equipped with a brush rake to minimize the amount soil incorporated into piles.

Tractor Logging (Yarding): Moving cut trees to a landing by dragging behind a ground based rubber tired or tracked skidder equipped with grapples.

Understory: The lower layer of trees and shrubs under the forest canopy.

Unstable or Potentially Unstable Areas: Lands that need protection to maintain natural disturbance patterns and functions, prevent increased landslide distribution in time and space (rate and frequency), prevent increased delivery of sediment, and maintain landslide-delivered supply of large woody material over several rotations.

Watershed Condition Class (WCC): The Forest LRMP established Thresholds of Concern for 5th field watersheds and defines Watershed Condition Class (WCC). The WCC are defined as follows:

- Watershed Condition Class I: ERA less than 40 percent TOC;
- Watershed Condition Class II: ERA between 40 and 80 percent TOC; and
- Watershed Condition Class III: ERA greater than 80 percent TOC.

The following summarizes the FSM 2521.1 – Watershed Condition Classes. The ERA evaluates watershed condition and assigns one of the following three classes:

1. **Class I Condition.** Watersheds exhibit high geomorphic, hydrologic, and biotic integrity relative to their natural potential condition. The drainage network is generally stable. Physical, chemical, and biologic conditions suggest that soil, aquatic, and riparian systems are predominantly functional in terms of supporting beneficial uses.

2. **Class II Condition.** Watersheds exhibit moderate geomorphic, hydrologic, and biotic integrity relative to their natural potential condition. Portions of the watershed may exhibit an unstable drainage network. Physical, chemical, and biologic conditions suggest that soil, aquatic, and riparian systems are at risk in being able to support beneficial uses.
3. **Class III Condition.** Watersheds exhibit low geomorphic, hydrologic, and biotic integrity relative to their natural potential condition. A majority of the drainage network may be unstable. Physical, chemical, and biologic conditions suggest that soil, riparian, and aquatic systems do not support beneficial uses.

Whole Tree Yard: The removal of a whole tree (including its bole, limb wood, branches and bark) to the landing, except for where the top of the tree is determined to be 3-inches in diameter, which is lopped off and left on site. Whole tree yarding does not remove broken limb wood, bark sloughing, and broken boles. Once at the landing, the tree is delimbed and cut into logs at specified lengths.

Yarding: Moving logs from the stump to a central concentration area or landing.

