

Appendix E: Definitions

Activity Generated Material – Woody material which is created or altered during thinning and cutting activities associated with contract operations.

Coarse Woody Debris – All logs, stems, limbs and tops of trees and brush, which are dead and lying on the ground prior to contractor beginning operations between 1”- 20” diameter.

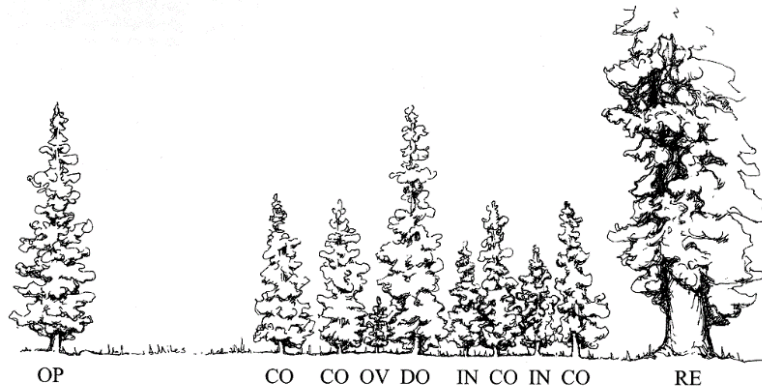
Conifer – An evergreen cone bearing tree, which usually has a single well-defined trunk and/or attains a height greater than 20 feet and retains green foliage throughout multiple seasons (i.e. pine, spruce, and fir species)

Control Area (Cultural and/or Threatened and Endangered (T&E) Sites) – Areas delineated by prespecified physical or virtual flagging for the purpose of protecting resources of concern. Locations where special protection is required to preserve and protect cultural values and species of plants or animals listed on the T&E list. Control areas often have no-work or specialized treatment specifications.

Compact Track Loader (CTL) – A low ground pressure type of mechanical equipment that exerts a ground pressure of less than 10 psi. A CTL or equivalent low ground pressure equipment is required to perform mechanical work in resource sensitive areas.

Crown Class – a category of tree based on its crown position relative to those of adjacent trees.

- Dominant (DO): Tree crowns receive full light from above and partly on the sides. Crowns extend above the general level of the crown cover of others of the same stratum and are not physically restricted from above, although possibly somewhat crowded by other trees on the sides. In even-aged stands, dominant trees rise somewhat above the general canopy.
- Codominant (CO): Tree crowns receive full light from above, but comparatively little from the sides. Crowns form a general level of crown stratum, are not physically restricted from above and are crowded by other trees from the sides. In even-aged stands, codominants form the general canopy.
- Intermediate (IN): Tree crowns occupy a definitely subordinate position and are subject to strong lateral competition from crowns of dominants and codominants. They receive little direct light from above through small holes in the canopy, but no light from the sides.
- Open (OP): Tree crowns that occupy openings and receive full light from above and sides. Trees typically growing in openings with limited to no competition from other tree canopies.
- Suppressed/Overtopped (OV): Tree crowns receive no light from above or from the sides and are entirely below the general level of dominant and codominant trees.
- Residual/Old-Growth(RE): Typically mature with well-developed crowns.



Damaged/Diseased Tree – Any tree with one or more of the following:

1. Broken or dead top, regardless of cause.
2. Vertical orientation of bole is lost.
3. Visible disruption of roots.
4. Dead or dying limbs/foliage within the upper three-fourths of the live crown

DBH (Diameter at Breast Height) – Diameter of trees measured at breast height (4.5 feet above ground, upslope side of tree).

Deck – Logs which have been processed and stacked parallel to each other in an organized stable manner.

Diameter – Other vegetation (not trees) is measured 1 foot above ground.

Excess Tree(s) – A tree or group of trees that is left but should have been cut to meet removal criteria, spacing, or trees-per-acre requirements. In some occasion they are left to meet other conditions or restrictions specified within the specifications typically for silvicultural or environmental reasons.

Hardwood – A broad-leaved tree, which usually has a single well-defined trunk and/or attains a height greater than 20 feet. (i.e. aspen and oak species). Sprouting hardwood species may be in the form of multi-stemmed clumps.

Infrastructure – All man-made improvements. This includes roads, parking areas, buildings, utilities (above/underground), gates, trails, campsite pads, firepits, picnic tables, bear boxes, posts, and signs.

Jackpot – Concentration of slash or natural fuels, heavier than the surrounding areas.

Ladder Fuels – Fuels that provide vertical continuity between the ground and the tree crowns thus are creating a pathway for surface fire to move into the overstory tree crowns. Generally less than 10 inches DBH.

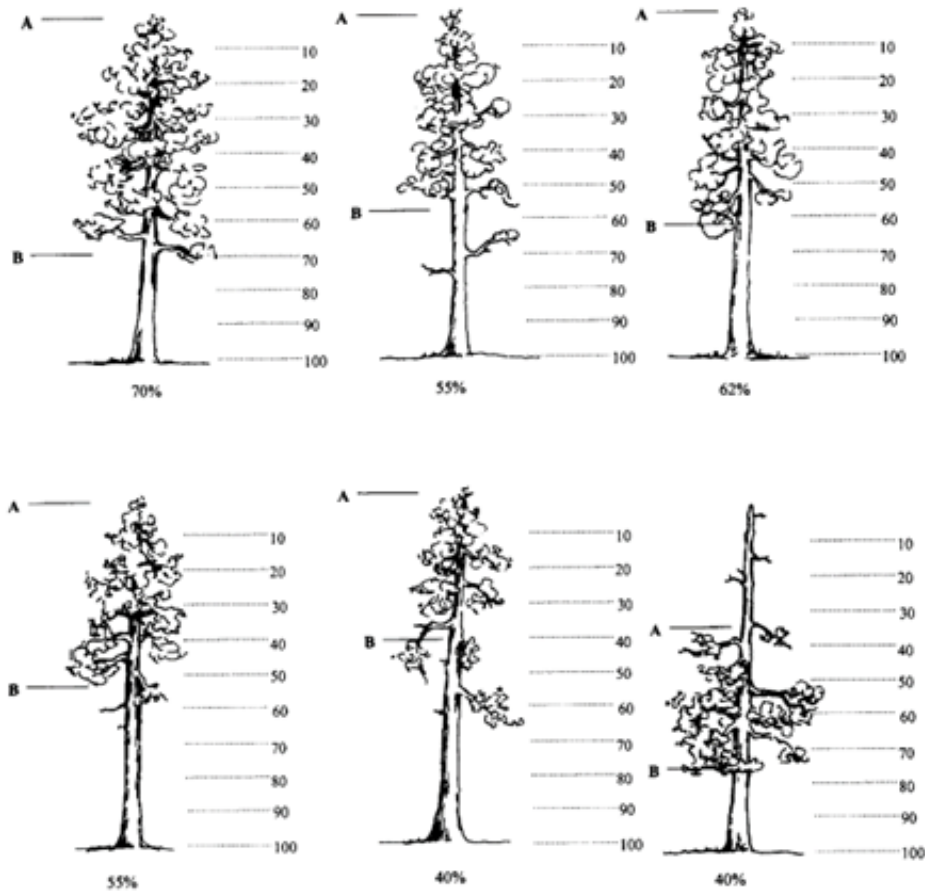
Landing – Area no bigger than 1 acre in size where logs are staged and processed for removal from project area.

Large Woody Debris – All logs which are dead and lying on the ground prior to contractor beginning operations greater than 20” diameter.

Leave Tree – A Dominant or Co-dominant tree, which is free from Damage/Disease, or a tree less than the desired DBH specified, and is left uncut (or should have been left uncut) by the Contractor to meet desired spacing or trees per acre requirements. Any live tree greater than 24 inches DBH are automatically considered to be Leave Trees.

Leave Tree Clump – A group of 3 to 12 Dominant and Co-dominant trees near one another, which is left (or should have been left) by the contractor to increase stand diversity.

Live Crown Ratio – This is the crown ratio, in percent as the length of the live crown divided by tree height. Live crown length is accessed from the uppermost live leader or branch to the lowest live branch. Visually adjust large openings in the crown or lopsided crowns by transferring lower branches to fill in the holes. Compressing the live crown length because the crown appears “sparse” or contains “unhealthy” foliage is not appropriate. Crown ratio is the portion of the tree bole supporting live, healthy foliage and is expressed as a percent of the actual tree height. The distance between A and B is the existing crown length.



Example of crown ratio as it relates to tree health and selection of leave/cut trees:

	<p>PREFERRED LEAVE TREES A = good vigor B = fair vigor to good vigor</p>	<p>CUT TREE CANDIDATES C and D = poor vigor</p>
<p>Ponderosa pine</p>	<p>A B C</p>	<p>D E</p>

Mobilization – The act of delivering all ordered personnel and equipment to the project area. The price for mobilization shall be included in the proposed unit prices.

Old Growth/ Legacy Trees – Trees which exhibit characteristics including furrowed or “platey” bark, high canopy base heights (distance from the ground to the bottom of the crown), large diameter branches, and DBH may be greater or less than 30 inches. Usually indicative of trees greater than 160 years old. Jeffrey pine trees exhibit these characteristics specifically furrowed brown-orange “platey” bark.

Overstory trees – Trees which are part of the highest strata (not including old growth) of trees within the stand, typically dominant and codominant trees.

Percent Cover – Portion of the project area beneath the drip line of vegetation to be cut or left untreated.

PSI (Pounds per Square Inch) – A unit of measurement of pressure in pounds of force exerted per square inch of area, commonly used in heavy equipment contracts where LOW PSI is required for resource protection.

Reserved Trees or Reserved Areas – Individual species of trees or certain areas within a treatment unit that the contract or COR designates are reserved from treatment.

Shrub (or brush) – Vegetation consisting of woody perennial plant smaller than a tree, usually having permanent single or multiple stems originating at or near the ground level not normally reaching 20 feet in height (i.e. bitter brush, manzanita, ceanothus, mountain mahogany, rhododendron, serviceberry, sagebrush, etc.).

Slash – Any cut vegetation and/or existing naturally (dead and down) woody debris. This includes stems, limbs, down logs, and brush that existed from previous activities or was generated by the contractor during current activities. Diameter to be piled, chipped, or removed will be specified. Limbs less than 1 inch in diameter and 2 feet in length are not defined as slash and may be left scattered on the forest floor.

Snag – A dead or living tree that has 10 percent or less live crown.

Superior Vigor Trees – Trees which exhibit healthy, dark green needle color. Needle length is longer and reaches further back on branches. Needle length on inferior vigor trees is shorter and often tufted nearer branch tips. Recent height growth is also greater on Superior Vigor Trees. May not always be the largest/tallest tree.

Supervisor (foreman) – A working (English speaking) supervisor, who is knowledgeable and experienced in the required work and supervision, shall be provided for each crew and is required to stay with the crew while work is in progress. If crew is non-English speaking, the supervisor must be bilingual in English and the language of the crew members.

Undesirable Trees – Conifer trees less than 24.0 inches DBH with one or more of the following attributes:

1. Damaged/Diseased Trees.

2. Trees with Suppressed and/or Intermediate crown position classification.
3. Excess trees not selected as Leave Trees.

Understory trees – Trees which are part of the lowest strata of trees within the stand, typically suppressed and intermediate trees.

Variable Density Thin (VDT) – Conifer thinning strategy which results in residual trees being spaced at varying distance from each other to encourage a “natural” non-uniform aesthetic

Water Body Buffer Zone (WBZ or WBBZ) – A 25 to 300-foot distance extending upslope on each side of a water body depending on the waterbody classification and slope adjacent to its banks, including stream channels regardless of the presence of water. Details regarding WBBZ can be found here [Regional Water Board site](#) and applicable Timber Waiver.

Wildlife Clumps – An area usually between 1/100 acre and 1/4 acre in size, where no trees have been cut or no trees should have been cut. Wildlife clumps are ideally somewhat denser than the surrounding forest area, and are usually dominated by smaller trees, with fuller crowns. These clumps of trees tend to break up horizontal visibility through the stand and offer various wildlife species a greater degree of cover and nesting possibilities. These clumps are only to left if specified in the specifications.