

DESCRIPTION PURSUANT TO K-C.3.5.7# - INDIVIDUAL TREE DESIGNATION (OPTION 1) (06/2008)

A. Leave Tree Marking (LTM), Designation by Prescription (DxPre), as referred to in Project 003 in Attachment B, is specified below:

- 1) Basal Area/Acre (BA) (Subdivisions 18, 22, 28, 30, 35, 38, 39, and 52):
  - a) Retain the desired square feet of basal area per acre, as specified in Table 1 below. Plot readings shall fall within +/- 10 square feet from the desired acceptable basal area per acre, as stated in Table 1. No plots will be accepted that fall outside of this range except when the residual basal area is higher than the desired basal area due to Ponderosa Pine and/or Western Larch 21 inches or greater at Diameter Breast Height (DBH) being present.
  - b) The following prioritized guidelines will be used for tree selection to attain leave trees at the desired residual basal area per acre.
    - i. All Western Larch and Ponderosa Pine 21 inches or greater at DBH shall be retained and shall be counted to achieve the desired residual basal area per acre.
    - ii. All trees within 25 feet of a yellow painted tree measured at DBH shall be retained. Those that meet the minimum specifications stated in A.2 shall be counted to achieve the desired residual basal area per acre. Yellow painted trees are to be retained and those that meet the minimum specifications stated in A.2 shall be counted to achieve the desired residual basal area per acre.
    - iii. All trees, except Western Larch and Ponderosa Pine greater than 21 inches at DBH and dead standing shall be cut within 30 feet of a pink painted tree. Pink painted trees shall be retained.
    - iv. All trees with a blue boundary tag and orange paint above and below stump level shall be retained. Those that meet the minimum specifications stated in A.2 shall be counted to achieve the desired residual basal area per acre.
    - v. All trees with a red equipment exclusion boundary tag and orange paint above and below stump level shall be retained. Those that meet the minimum specifications stated in A.2 shall be counted to achieve the desired residual basal area per acre.
    - vi. All trees not specified in Table 1 below, including hardwoods, shall be retained. Those trees, except hardwoods, that meet the minimum specifications stated in A.2 shall be counted to achieve the desired residual basal area per acre.
    - vii. Leave trees shall be chosen from the most vigorous and healthy trees with crown ratios of 30 percent or greater and in the dominant and codominant crown classes. Leave trees should be free of insects (no pitch tubes), Dwarf Mistletoe, and rot. When tree health is equal, use the following guidelines to retain the desired residual basal area per acre.
      1. Cut Grand Fir that is suppressing healthy Ponderosa Pine 10 inches or greater at DBH.
      2. Use the following species preference to select leave trees:
        - i. Ponderosa Pine
        - ii. Western Larch
        - iii. Western White Pine
        - iv. Western Red Cedar
        - v. Douglas-fir
        - vi. Grand Fir
- c) DxPre Definitions:
  1. Crown Ratio - the ratio of crown length to total tree height.
  2. Crown Class - a category of tree based on its crown position relative to those of adjacent trees.
  3. Dominant Tree - a tree whose crown extends above the general level of the main canopy
  4. Codominant Tree - a tree whose crown helps to form the general level of the main canopy

- 5. Suppressed Tree - a tree whose crown is completely overtopped by the crowns of one or more neighboring trees.
- 6. Vigor - healthy, well-balanced growth.

TABLE 1.

SUBDIVISION	DESIRED RESIDUAL BASAL AREA PER ACRE	CUT SPECIES
18	130	PP*, WL*, WWP, WRC, DF, GF
22	90	PP*, WL*, WWP, WRC, DF, GF
28	90	PP*, WL*, WWP, WRC, DF, GF
30	130	PP*, WL*, WWP, WRC, DF, GF
35	80	PP*, WL*, WWP, WRC, DF, GF
38	90	PP*, WL*, WWP, WRC, DF, GF
39	100	PP*, WL*, WWP, WRC, DF, GF
52	100	PP*, WL*, WWP, WRC, DF, GF

PP-Ponderosa Pine, WL-Western Larch, WWP-Western White pine,  
WRC-Western Red Cedar, DF-Douglas-fir, GF-Grand Fir

\*Note - Only PP and WL under 21 inches DBH will be cut.

- 2) Spacing (Subdivisions 151, 152, 153, 155, 156, 157, and 158):
  - a) Leave trees shall be selected using the spacing guidelines, as specified in Table 2 below. Spacing may be varied up to 25 percent to retain the most desirable tree. No plots will be accepted that fall outside of this variance except when Ponderosa Pine and/or Western Larch 21 inches or greater at DBH are located closer than the desired spacing.
  - b) The following prioritized guidelines will be used for tree selection to attain leave trees at the desired spacing.
    - 1. All Western Larch and Ponderosa Pine 21 inches or greater at DBH shall be retained and shall be counted to achieve the desired spacing.
    - 2. All trees within 25 feet of a yellow painted tree measured at DBH shall be retained. Those that meet the minimum specifications stated in A.2 shall be counted to achieve the desired spacing. Yellow painted trees are to be retained and those that meet the minimum specifications stated in A.2 shall be counted to achieve the desired spacing.
    - 3. All trees, except Western Larch and Ponderosa Pine greater than 21 inches at DBH and dead standing shall be cut within 30 feet of a pink painted tree. Pink painted trees shall be retained.
      - a. All trees with a blue boundary tag and orange paint above and below stump level shall be retained. Those that meet the minimum specifications stated in A.2 shall be counted to achieve the desired spacing.
      - b. All trees with a red equipment exclusion boundary tag and orange paint above and below stump level shall be retained. Those that meet the minimum specifications stated in A.2 shall be counted to achieve the desired spacing.
    - 6. All trees not specified in Table 1 below, including hardwoods, shall be retained. Those trees, except hardwoods, that meet the minimum specifications stated in A.2 shall be counted to achieve the desired residual basal area per acre.
    - 7. Outside of the above areas, use the following species preference to select leave trees to achieve the desired spacing:
      - (a) Ponderosa Pine
      - (b) Western Larch
      - (c) Western White Pine

- (d) Western Red Cedar
- (e) Douglas-fir
- (f) Grand Fir

TABLE 2.

SUBDIVISION	DESIRED SPACING IN FEET	CUT SPECIES
151	22	PP*, WL*, WWP, WRC, DF, GF
152	25	PP*, WL*, WWP, WRC, DF, GF
153	25	PP*, WL*, WWP, WRC, DF, GF
155	22	PP*, WL*, WWP, WRC, DF, GF
156	22	PP*, WL*, WWP, WRC, DF, GF
157	25	PP*, WL*, WWP, WRC, DF, GF
158	25	PP*, WL*, WWP, WRC, DF, GF

*PP-Ponderosa Pine, WL-Western Larch, WWP-Western White Pine, WRC-Western Red Cedar, DF-Douglas-fir, GF-Grand Fir*  
*\*Only PP and WL under 21 inches DBH will be cut.*

- 3) Tree Marking paint application for LTM's:
  - a) Orange tree marking paint shall be provided and applied by the Contractor.
  - b) The amount of paint applied should be of sufficient quantity to remain visible on marked trees after this contract has been completed.
  - c) Trees shall be marked in such a manner that:
    - (1) Paint is visible from all sides.
    - (2) Painted stump marks will be on the downhill side of the tree touching the ground and be of sufficient size. Stump marks will be painted in a way that ensures they cannot be rubbed off if scraped and must be present and identifiable after the timber harvest operations in this contract.
  - d) When Black paint is used to delete prior work, the entire prior stump mark must be covered. Other deleted paint marks shall have Black paint applied but the original color need not be totally blacked out. Black paint will be provided by the contractor.