

## **Io Thinning Specifications (DxP)**

### **THINNING SPECIFICATIONS FOR TREES 9.0 to 20.9 inches DBH :**

Trees will be left in a variable and irregular spatial arrangement. Retain all trees greater than 21 inches.

These stands are dominated by second growth ponderosa pine and are fairly uniform. Consequently, look for unique structural components and configurations and maintain and/or enhance these features. For example, large old growth trees and patches of trees, clumps or patches of second growth that is stratifying both horizontally and vertically, new/younger cohorts and opportunities where existing gaps that can be expanded or new gaps created.

Remove second growth trees from around old growth trees by leaving no more than 30-50 basal area around those old growth trees. The exception to this would be when the old growth tree is very poor and does not appear that it will last very long.

Use the largest trees in any particular location as the focal point for building patches and clumps of trees.

Work with the existing spatial arrangement at any particular location.

Look for arrangements of trees in which the trees within the clump have already started to stratify into different size trees similar to what you might find in historic old growth clumps. Leave trees <9 inches dbh in these clumps if they appear a natural part of the clump.

Look for natural arrangements of trees in which the trees are starting to stratify vertically from which to build clumps, especially in the mid-cohort structural component.

Clump size can vary between 1 and 2 trees to as many as 10 to 20 or more trees.

Create separation between patches by deliberately removing trees between clumps to create small gaps. This would especially apply between clumps of trees with old growth characteristics and second growth clumps. Try to make good separation 50-100ft + between old growth clumps and younger tree clumps.

Overall stand averages for density should be between 60 and 80 BA.

### **THINNING SPECIFICATIONS FOR TREES 6.0 to 8.9 inches DBH :**

Thin from below with variability in a density, spacing and structure. Strive for an irregular mosaic of patches/groups/clumps of trees.

Leave all old growth trees of any species (primarily ponderosa pine and western juniper) regardless of size, condition, density or spatial arrangement.

Leave the healthiest dominant/co-dominant trees regardless of spacing. Leave clumps 25 feet from residual trees (greater than 9.0" DBH) that range between a few to 4-9 trees, with small gaps in between. Don't strive for uniformity of spacing, but rather an irregular mosaic of patches/groups/clumps/ of trees. Leave intermediate and suppressed trees if appropriate to creating a groups & clumps.

The density of trees <9" DBH will depend on the presence of trees ≥ 9" DBH. When trees ≥ 9" DBH are present, then leave trees < 9" DBH on a 25' to 35' spacing from trees ≥ 9" DBH. When no trees ≥ 9" DBH are present, then leave trees < 9" DBH on a 20' – 30' spacing. The spacings above are just an average; be sure to strive for variability in density, spacing and structure. Trees <9" DBH can be left among trees ≥ 9" DBH if they are part of the natural arrangement of a clump.

The selection of species to leave will be in the following order of preference (from the most desirable to the least desirable): ponderosa pine, western juniper, and white fir.

Please note:

Some areas of these units are dominated by trees < 9" DBH with scattered trees >9" DBH. In these areas, the density of trees >9" DBH is less than the target density and no trees >9" DBH will need to be cut.

Additionally, there are clumps of trees in these units that are dominated by Old Growth. In these old growth clumps, no trees >9" DBH will need to be cut. The only trees that could be cut in these old growth clumps are obvious second growth trees that have encroached into the clump.

In other words, there will be some areas in these units that will just be thinning <9" DBH trees or biomass thinning and will more or less be "walk-through" areas for cutting purposes, consequently, don't feel as though you need to cut trees 9"+ in these areas.

#### **Cut Tree Execution for trees less than 9 inches:**

##### **(a) Trees to Cut:**

- (1) All live excess and cull trees between 6 and 9 inches DBH not needed to meet variable spacing requirements, or not otherwise designated as a leave tree or a reserve tree.
- (2) All dead trees over between 6 and 9 inches DBH.

##### **(b) Cut trees shall be:**

- (1) Cut below the lowest live limb. Live limbs are acceptable on a stump cut within 2 inches of the ground surface. Stumps taller than 2 inches and which contain live green limbs will be counted as an excess tree on the inspection summary.
- (2) Cut so that stumps are no more than 6 inches above the ground level.
- (3) Completely severed from the stump. A cut tree not completely severed from the stump will be counted as an excess tree on the inspection summary. Stump angle shall be less than 30 degrees.
- (4) Felled away from all roads, established trails, streams, fence lines, utilities, etc.
- (5) Felled to remain within the contract unit boundary and not be hung up.
- (6) Whenever possible, felled away from leave trees, activity-created or existing slash brush, toward openings, skid trails and landings.