

Gaps flagged pre-harvest, 6/21/18

Gap 0.15B: Alder adjacent

Gap 0.05B: Alder adjacent

Gap 0.25A: Alder adjacent

Gap 0.15A

Gap 0.25B

Gap 0.05A

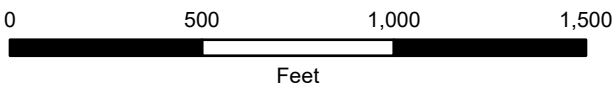
Treatment Impacts on Timber Yield

Treatment	Acres	Mean dbh cut	MBF /acre cut	% increase in MBF*
Status quo	4	18.6	8.5	
Thin	3.9	16.9	13.9	63
Gap	0.9	21.1	58.6	589
Thin+gap	4.8	17.7	22.2	167

*Compared to status quo mark

Gaddis Creek Treatment Areas

- Watercourses:
 - Class I
 - Class II
 - Class III
- Roads:
 - Paved Permanent
 - Gravel Permanent
 - Seasonal
 - 40ft Contour
- Stream Plot
- Property Boundary
- 580 Harvest Area
- Treatment
 - Treatment 1
 - Treatment 3



Treatment impacts on Timber Revenue

Revenue from all of WLPZ harvesting = \$37,906
 Total acres harvested = 8.8 (\$4,308/acre)
 \$/acre from Tx 1 (status quo) = \$2,286
 \$/acre from Tx 3 (thin+gap) = \$5,992
 Marginal net revenue to BFRS = \$17,789
 I.e. BFRS has \$17,789 in extra \$ to pay for follow-up fuel treatments in riparian zones

Treatment 1. Harvest with Equipment Exclusion

This treatment represents a status quo alternative, where the management decision is to harvest timber while relying on the CA forest practice rules to protect riparian resources. Trees will be hand felled to maximize the extraction of timber while retaining a protective structure as defined in the forest practice rules. It is expected that directional felling will be the primary method of extraction (i.e. the tops of trees will reach outside of the WLPZ and can be dragged out). However, felled trees may also be winched out with a cable if necessary or shovel yarded via reaching in with the boom of equipment. No additional treatments will occur.

Marking guidelines:

- Extract as much value as possible while retaining 125ft²/acre, wherever this much stocking existed prior to harvest.
- Marking should take into account that heavy equipment will not be allowed in the WLPZ

Apply protective measure “G” from the forest practice regulations:

- Leave at least 50% of the overstory and 50% of the understory canopy covering the ground in a well distributed multi-storied stand composed of a diversity of species similar to that found before operations. More than 125ft²/acre may be necessary to retain in order to leave 50% overstory canopy cover (i.e. because of very large trees).
- The residual canopy shall be composed of at least 25% of the existing overstory conifers

Treatment 2. Fuel treatment with equipment

This treatment’s intent is to reduce fire severity, using a combination of commercial thinning with heavy equipment and surface/ladder fuel treatments. The operations are not constrained by forest practice regulations. I.e. the area should be treated using standard approaches to reducing wildfire severity in upslope areas.

Marking guidelines:

- Thin from below to a residual basal area of 150ft²/acre, wherever this much stocking existed prior to harvest
- Prefer to remove white fir/incense cedar, followed by Douglas-fir/sugar pine, and finally ponderosa pine
- Prefer to leave large trees with thick bark and high height to crown bases
- Maximize spacing among residual trees, but as lower in priority compared to species and tree size retention described above

Treatment 3. Fuel treatment plus structural restoration with equipment

This treatment’s intent is to reduce fire severity, as with Treatment 2. In addition, canopy gaps will be installed in order to mimic locally intense fire occurring in riparian areas.

Marking guidelines for installing gaps (i.e. in addition to the guidelines for Treatment 2):

- Gaps should range in size from 0.1 to 0.4 acres. Gaps may extend upslope of the WLPZ boundary, as long as at least half of the gap area is within the WLPZ.
- Total area within gaps should be roughly equal to 15% of the WLPZ area
- Prefer gap placement in structures that are most likely a result of fire suppression (e.g. patches of WF/IC mid-story trees). Gaps should be at least one tree canopy width apart from each other