

Vegetation / Fuels Treatment Prescription - Douglas-fir / Tanoak and Tanoak / Douglas-fir Series

Vegetation Condition Classes (3,7,8) General Px for DF/Tanoak and Tanoak/ DF Plant Series		Adjustments To Px Specific To		
		Plant Association	Neighborhood or O.I. Unit	Land Allocation/ Soil Type
Stand Description Objectives	<p>Douglas-fir and tanoak plant communities line both sides of the Hellgate Recreation Area, downstream of Robertson Bridge. The most common plant associations found are Douglas-fir/canyon live oak-poison oak and Douglas-fir/black oak-poison oak on southerly aspects, and Douglas-fir/tanoak/canyon live oak or tanoak/Douglas-fir/canyon live oak-dwarf Oregon grape on northerly aspects.</p> <p>In the last 50 years, lack of fire has enhanced tanoak’s competitive status. Unlike many of Tanoak’s associates, frost, drought, and fire limit the survival and ability to compete. The effects on species composition and stand structure are evident. Stands approaching 100% canopy cover are common. Tanoak or Canyon Live Oak has filled in canopy gaps with flattened shaped crowns. Coupled with high stand densities stand differentiation has slowed in lower canopy levels .</p> <p style="text-align: center;">Goals</p> <p>Utilize the VRM 1 project guidelines for understory and overstory percent disturbance outlined in description of alternatives. Maintain plant series within its natural direction of succession by incorporating fuel treatment and silviculture strategies that aid in reducing stand density to more normal ranges. Reduce the overall stand basal area to increase tree growth, quality and vigor of the remaining trees. Release individual large conifer and hardwood trees. Create diversified stand structure (height, age and diameter classes) Maintain flexible parameters with adjacent land owners with a combination of approaches that can be applied to each situation. They may choose a moderate or more extensive approach. Reduce surface fuel hazard within the Defense Zone, Threat Zone and General Forest using on and offsite disposal of slashed material. Minimize return intervals and cost to reduce fuel hazard build up within 5-10 year treatment spectrum.</p>			
Side Boards/ Unique Features	<p>Adjustments to meet VRM 1 ??? <i>Screening, phased treatment intervals, irregular spacing pattern....</i> Botany Plants <i>plants that live in Pine crowns, in Oak Habitat, in the Upper Crust....</i> Osprey, Bald Eagle Nests, Migratory birds.....</p>	Apply PDF found in E.A.	Apply PDF to known areas	60% canopy retention in Late Succession Reserve land allocation
Insects/ Diseases	GIS Disease Flight Coverage			
Silv Approach	Density Management by understory variable crown thinning	Ideal px is variable crown thinning. In situations where this is not possible due to crown development an understory thinning based on spacing by diameter would be used.		

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Understory Thinning	<p><i>Understory Thinning Seen Area and Seldom Seen Area:</i> Understory thinning is intended to improve growth, canopy width, and increase gap formation. An understory thinning will be applied to allow for increased growth by release from excessive competition. Also, thinning will reduce the amount of understory live fuel that contributes to ladder fuel conditions. Understory thinning will treat conifer, hardwood trees, and shrub species.</p>	Methods to avoid excessive tanoak sprouting in Seen and Seldom Seen Areas:		
Fuels Reduction Treatments	<p>For all treatments, all maple species, dogwood, pacific yew, black oak, white oak, Port -Orford cedar <i>-not identified in project area</i>), alder, vaccinium ssp (except evergreen), willows, and serviceberry will be reserved, regardless of spacing (<i>i.e.</i> not included in spacing or considered leave trees). 3/22/03 Size of material thinned will depend on alternative chosen.</p> <p><i>Fuels Reduction Treatments</i> Conifer trees, hardwood trees, and shrubs that are considered for treatment include those between one inch DBH and 12 inches DBH (depends on alternative chosen). All trees greater than (? see selected alternative) inches DBH in the seen area or (Selected alternative?? / inches DBH in the unseen area) are considered reserved trees. Treatment is to space out conifer trees, hardwood trees, and shrubs to specifications as described under Understory Thinning. Slashing excess trees and shrubs 1 inch to ??8 inch DBH would occur. Trees greater than 8 inches and less than 12 inches DBH (Depends on alternative selected) would be girdled where they exist in excessive amounts, do not pose a safety hazard, and are outside the seen area. Where available, slash treatment would be mechanical chipping, slash buster or offsite disposal. UB – mosaic underburn under reserved overstory. HP - Hand pile slash 1"-8" x 2', cover, and burn piles.</p> <p style="text-align: center;">Seen Area:</p> <p>Thin conifers and hardwoods to a 1x crown radius spacing (=/- 25%), with a leave tree species preference of SP, JP, PP, DF, IC, madrone, TF, liveoak, tanoak, chinkapin. Trees with the largest and best-formed crowns will generally be selected as leave trees, the largest crown being utilized to determine spacing. Brushing - cut</p>	<p>Cutting the hardwood low to the ground will increase the amount and vigor of tanoak sprouts. Therefore high stump tanoak selected for cutting that is >3 inch diameter.</p> <p>Avoid cutting tanoak where sprouting would add significantly to the future fuel ladders and follow up maintenance will be difficult. Decrease the percentage of T.O cut and increase the percentage of Madrone and Canyon Live Oak in these areas.</p>		

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	<p>shrubs away from leave trees for a radius of 15'-25', except for reserved species and berry producing whiteleaf and greenleaf manzanita with crowns greater than 6 feet diameter. All trees 12"+DBH (depends on alternative chosen) are reserved from cutting. Conifer leave tree species: SP - sugar pine, JP - Jeffrey pine, PP - ponderosa pine, DF - Douglas-fir, IC - incense-cedar, TF - true fir (<i>Abies</i>) of any species.</p> <p style="text-align: center;">Seldom Seen Area</p> <p>Thin conifers and hardwoods to a 1 1/2x crown radius spacing (=/- 25%), with a leave tree species preference of SP, DF, JP, PP, IC, TF, liveoak, tanoak, chinkapin, madrone. Trees with the largest and best-formed crowns will generally be selected as leave trees, the largest crown being utilized to determine spacing. Brushing - cut shrubs away from leave trees for a radius of 15'-25', except for reserved species and berry producing whiteleaf and greenleaf manzanita with crowns greater than 6 feet diameter. All trees 12"+DBH (depends on alternative chosen) are reserved from cutting. Conifer leave tree species: SP - sugar pine, JP - Jeffrey pine, DF - Douglas-fir, IC - incense-cedar, TF - true fir (<i>Abies</i>) of any species, PP - ponderosa pine.</p> <p>Tanoak sprouts: Cut so that the two most dominate sprouts remain.</p>			
Leave/Retain				
Snags	<p>Leave Stage 1 snags in the interior of homogeneous conifer stands where snags are not prevalent. Buffer snags 17 inches DBH & greater from damage by leaving all green trees for a radius equal to the height of the snag. In areas where pockets of Stage 1 snags are found (adjacent to shrublands & woodlands), leave all snags that do not pose a safety hazard. Consider leaving trees with <u>Fomes pini</u> that have healthy crowns.</p>			
CWD	Add PDF from E.A.			
Future Treatments	<p>Maintenance brushing, thinning, burning would occur with a return interval of 3-5 years based on review using BLM Visual Contrast Rating and Vegetation/fuel decision matrix.</p> <p>Over all units leave scattered unthinned patches 1/10th to 1/4 acre in</p>			

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	size to buffer sensitive plants, visual screening, sensitive soils, active nests, etc.			
Expected Outcomes	The understory and overstory canopy reduction treatments will cause the necessary disturbance to provide individual tree growing space and for stand differentiation to continue. Crown ratios throughout the stand will be increased over time. Stand density will be reduced to levels that reduce competition between trees. Consequently, growth rates will increase. Tree vigor and resiliency to insect and disease attack will be enhanced as competition is decreased.			