

Attachment 2 – Additional Project Design Features

The following are relevant project design features from the Craggy Vegetation Management Project Record of Decision (5/22/2018) that supplement the Scope of Work provisions included in the Timber Sale Agreement.

Design Feature	Description	Applicable Action Alternatives/ Areas or Units	Rationale or Applicable Standard and Guideline
Invasive Species-3	If potential landing sites are infested with noxious weeds, consult with the district botanist to determine appropriate methods for containing and/or managing the infestation. Methods may include blading infested soil away from activity zones and covering this soil; or adding a barrier to the landing so seed banks cannot be transported.	<u>All Alternatives:</u> All Thinning with Removal Units	Forest Plan S&G 21-53
Invasive Species-5	Any facility that provides material such as rock, gravel, or boulders to be used in the project area should be inspected and determined to have limited potential for the spread of noxious weeds from stored material. Material stockpiles must be noxious weed free.	<u>All Alternatives:</u> All Units	Forest Plan S&G 21-53
Scenery-4	For all treatment units along moderate sensitive Forest Routes (roads and trails), and adjacent to dispersed recreation sites identified by Motor Vehicle Use Map access roads in the project area, low-stump (6-8" or less) all higher concentrations of cut trees that are visible on uphill and downhill slopes from the roadside viewing area.	All Alternatives: Forest Route (Moderate Sensitivity): 45N28; Siskiyou County 7G-01 (Greenhorn Road). Access Roads to Dispersed Sites: 51D027, 51D025, 51D028 Trails: 5594, 5596, 55109 Treatment Units: 133-89G, 134-33S, 134-34G, 134-55G, 134-58G, 134-107S, 134-242G, 134-240G, 138-11G, 138-11S, 138-46E, 138-102P, 138-155S, 138-70P, 544-17S, 544-19S, 544-20E, 544-222S FBP1, FBR1, FBR2, FBR3, FBS1, FBS3, FBS-4	Forest Plan S&G 11-1, 11-3, 11-4.
Recreation-5	No ground-based logging equipment shall cross any designated trail in the project area unless the Landscape Architect and/or District Recreation Officer is consulted for mitigation measures.	<u>All Alternatives:</u> Trails: 5594, 5596, 55109 Units: 134-240G, 134-55G, 134-245G, 134-58G, 133-89G	Forest Plan S&G 12-14
Watershed-2	Post-treatment soil cover will range from 50 to 80 percent depending on slope steepness, soil texture, and fuel reduction treatments.	<u>All Alternatives:</u> All Thinning and Mastication Units	(R5 BMP 5.5), Forest Plan S&G 3-2

Design Feature	Description	Applicable Action Alternatives/ Areas or Units	Rationale or Applicable Standard and Guideline
Watershed-4	<p>Mechanized equipment will be restricted to:</p> <ol style="list-style-type: none"> <li>1. If soil texture is Loam or finer: Slopes less than 45 percent</li> <li>2. If soil texture is Sandy Loam or coarser: Slopes less than 35 percent</li> <li>3. Mechanized equipment will be restricted to travelling generally in straight up and down patterns on slopes 35 to 45 percent and on steeper slopes for short portions (100 feet or less) regardless of texture when necessary</li> <li>4. Where equipment will be operating on &gt;45% slopes for more than just short stretches a cable-assist tether will be required.</li> <li>5. In stands where tractor skidding is used and, where practical, logs should be placed in bundles on slopes less than 35 percent.</li> <li>6. Skid trails that connect benches separated by short steep slopes (broken ground) can have minor portions (100 feet or less) of the skid trail on slopes greater than 35 percent.</li> </ol> <p>Soil texture will be determined by the project soil scientist.</p>	<p><u>All Alternatives:</u> All Thinning with Removal and Mastication Units</p>	<p>National Core BMP Veg-4 (R5 BMP 1.9)</p>
Watershed-5	<p>Skidding equipment can operate in terraced plantations with slopes greater than 35 percent with the following restrictions: terraces will be used that are generally wide enough to accommodate harvesting and skidding equipment to limit increasing the cut and fill slopes on terraces. Skidding between terraces will be limited and locations of these skid trails will be flagged by the timber sale administrator with input from the project soil scientist.</p>	<p><u>All Alternatives:</u> All Thinning with Removal Units</p>	<p>(R5 BMP 1.10)</p>
Watershed-6	<p>No full bench skid trails will be constructed except in terraced plantations and then only on existing terraces. (Full bench skid trails have the entire skid trail cut into the hill slope).</p>	<p><u>All Alternatives:</u> All Thinning with Removal Units</p>	<p>(R5 BMP 1.10)</p>
Watershed-10	<p>Limit equipment disturbance within 20 feet on either side of swales by minimizing equipment crossings and avoiding running trails up the axis of swales. Swales are shallow ephemeral channels that do not meet the definition of a riparian reserve because they lack annual channel scour.</p>	<p><u>All Alternatives:</u> All Thinning and Mastication Units</p>	<p>National Core BMP AqEco-1, AqEco-2 and Veg-3 (R5 BMP 1.19)</p>
Watershed-11	<p>Place corridors for skyline-yarding outside hydrologic riparian reserves parallel to the stream channel unless field assessment by soil scientist and sale administrator determines that placing them within the riparian reserve will not substantially damage residual trees, soil, or fish. Full suspension will be required for any yarding across or over perennial and intermittent streams to avoid damage to stream banks.</p>	<p><u>All Alternatives:</u> All Thinning with Removal Units</p>	<p>National Core BMP Veg-5 (R5 BMP 1.8, 1.11)</p>

<b>Design Feature</b>	<b>Description</b>	<b>Applicable Action Alternatives/ Areas or Units</b>	<b>Rationale or Applicable Standard and Guideline</b>
Watershed-12	Cable corridors will be placed on the landscape as to minimize disturbance to unstable lands (such as inner gorges, active landslides and toe zones). The layout will avoid yarding logs up the axis of the features.	<u>All Alternatives:</u> All Thinning with Removal Units	(R5 BMP 1.6)
Watershed-13	Trees may be removed from riparian reserves if i. Trees must be removed to provide safe road passage or campground access and function; OR ii. Those trees would pose a substantial risk to the forest road drainage system integrity; OR iii. A fish biologist ensures that removal of these trees within riparian reserves is consistent with the Aquatic Conservation Strategy objectives.	<u>All Alternatives:</u> All Thinning with Removal Units	National Core BMP Plan-3 (R5 BMP 1.8)
Watershed-14	Trees directly rooted into the banks or otherwise and obviously integral to the stability of the channel bank will not be removed. Trees in the upland areas directly affecting streams will be directionally felled to protect stream banks.	<u>All Alternatives:</u> All Thinning Units	National Core BMP AqEco-1, AqEco-2 and Veg-3 (R5 BMP 1.19)
Watershed-15	To minimize the concentration of surface runoff, slash or water bars will be applied to corridors, skid and swing trails where the ground cover is below 50 percent and where necessary to prevent runoff from entering the swing trails and stream channels. At project completion, permanent operating waterbars will be installed and/or repaired as necessary.	<u>All Alternatives:</u> All Thinning with Removal Units	(R5 BMP 1.10, 1.17)
Watershed-16	Perennial streams, even if dry, will not be crossed by skid trails. Intermittent channels may be crossed when dry and at locations designated by the Forest Service.	<u>All Alternatives:</u> All Thinning with Removal Units	National Core BMP AqEco-1, AqEco-2 and Veg-3 (R5 BMP 1.19)
Watershed-17	Skid trails that cross intermittent streams or dry swales (i.e. depressions in the landscape that do not meet the definition for a designation as riparian reserve) will be restored before any storm (with reasonable chance of causing offsite sediment movement), or after use is complete. This generally consists of removing excess soil, reshaping and waterbarring former approaches, and spreading slash on the former crossing.	<u>All Alternatives:</u> All Thinning with Removal Units	National Core BMP AqEco-1, AqEco-2 and Veg-3 (R5 BMP 1.19)
Watershed-18	Dry intermittent streams may be crossed by a masticator at designated sites only after field review and approval by a Forest Service hydrologist. No perennial streams, even when dry, will be crossed.	<u>All Alternatives:</u> All Mastication Units	National Core BMP AqEco-1, AqEco-2 and Veg-3 (R5 BMP 1.19)

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Watershed-19	<p>Masticators will not operate within 150 feet of slope distance on perennial streams and 100 feet of slope distance on each side of intermittent streams, or the site potential tree height distance on each side of the stream, whichever is greatest (per Aquatic Conservation Strategy Objective 8). A masticator will not operate beyond the break in slope of any inner gorge. Consultation with the project fish biologist or hydrologist will occur to determine if any additional buffer width for masticator equipment is needed for a particular riparian reserve.</p>	<p><u>All Alternatives:</u> All Mastication Units</p>	<p>National Core BMP AqEco-1, AqEco-2 and Veg-3 (R5 BMP 1.19)</p>
Watershed-20	<p>Existing landings will be used to the extent possible. Construct new landings outside both hydrologic and unstable-land riparian reserves and away from locations where sediment is likely to enter streams (areas that have a hydrologic connection to streams). If the existing landings are within 50 feet of slope distance to a stream channel or inner gorge they will not be used without consultation with the project hydrologist.</p>	<p><u>All Alternatives:</u> All Thinning with Removal Units</p>	<p>National Core BMP Veg-6 (R5 BMP 1.12)</p>
Watershed-21	<p>Once project activities are completed, re-establish natural runoff patterns on those landings used for the project (hydrologic stabilization) to protect water quality. Minimize sidecasting of material during maintenance, construction or reconstruction of landings. Use slash or straw to stabilize disturbed soil on fill slopes.</p>	<p><u>All Alternatives:</u> All Thinning with Removal Units</p>	<p>National Core BMP Veg-6 (R5 BMP 1.16)</p>
Watershed-22	<p>Fueling and servicing of vehicles used for proposed activities will be done outside of hydrologic riparian reserves except at designated landings in locations where most disconnected from water resources.</p> <p>A spill containment kit will be in place where refueling and servicing take place. Report spills and initiate appropriate clean-up action in accordance with applicable state and federal laws, rules and regulations. The forest hazardous materials coordinator's name and phone number shall be available to Forest Service personnel who administer or manage activities utilizing petroleum-powered equipment.</p> <p>In the occurrence of a spill which may affect listed aquatic species, NOAA Fisheries will be notified for emergency consultation.</p>	<p><u>All Alternatives:</u> All Applicable Units</p>	<p>National Core BMP Road-10 (R5 BMP 2.11)</p>

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Watershed-23	Use temporary roads on existing roadbeds instead of constructing new temporary roads except: (1) when temporary roads on existing roadbeds are located within stream-course riparian reserves (unless the only way to access the unit will be to use a stream crossing on an existing roadbed); or (2) when temporary roads on existing roadbeds are located on highly erosive soils, active landslides, wetlands or meadows (excluding small springs and seeps).	<u>All Alternatives:</u> All Temporary Roads	National Core BMP Road-3 (R5 BMP 2.3)
Watershed-24	Improvements to existing roads in the project area will not over-steepen road cuts, will minimize sidecasting, and maintain the ditches and cross drains or any outslope of the roadway.	<u>All Alternatives:</u> All Applicable Roads	National Core BMP Road-3 (R5 BMP 2.3)
Watershed-25	Spot rocking will be used as necessary if small and isolated portions of the road system do not adequately dry to allow haul when most of the road is capable of haul. Ensure haul over the newly rocked areas will not create adverse impacts, such as sediment moving offsite towards channels.	<u>All Alternatives:</u> All Applicable Roads	National Core BMP Road-4 (R5 BMP 2.4)
Watershed-27	Take-offs of temporary roads, skid and swing trails that intersect roads will be obliterated or effectively blocked to vehicle access following unit treatment.	<u>All Alternatives:</u> All Thinning with Removal Units	(R5 BMP 1.10)
Watershed-28	Temporary roads on existing road beds and new temporary roads will be blocked at the end of the normal or extended operating season when project activities cease due to wet weather conditions. All temporary roads will be hydrologically restored at project completion, which may include removal of culverts and fills at stream crossings, out-sloping of road surfaces, obliteration of road segments, and water barring or covering with slash.	<u>All Alternatives:</u> All Temporary Roads	National Core BMP Road-3 (R5 BMP 2.3)
Watershed-36	<p>Restrictions for hand pile construction</p> <ul style="list-style-type: none"> <li>• Place in a checkerboard pattern whenever possible (not one pile directly above another).</li> <li>• Hand piles must be small in size, 6 feet or less in diameter.</li> <li>• No hand piles within 15 feet of any perennial or intermittent stream channel.</li> <li>• Between 15 and 30 feet, hand piles may be constructed if the following conditions exist: (1) not granitic soils, (2) slope is less than 35 percent, or (3) ground cover is greater than 50 percent. If the condition cannot be met, then slash should be lopped and scattered.</li> </ul>	<u>All Alternatives:</u> All Fuel Break and Thinning Units	National Core BMP Fire-2 (R5 BMP 6.3)
Wildlife-6	No known bald eagle nest trees, perch trees, or roost trees within winter roost areas will be removed or destroyed as a result of project activities if discovered.	<u>All Alternatives:</u> All Applicable Units	Bald and Golden Eagle Act

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Wildlife-7	To minimize effects on bald eagles, prescribed burning will not occur in or within 0.5 miles of a known or suspected nest territory from January 1st to August 31 <sup>st</sup> . Activities that create noise above ambient levels within 0.25 miles of active or suspected bald eagle nests if discovered, or occur within 0.5 miles of line-of-sight of such nests, will be seasonally restricted from January to August 31. If surveys demonstrate that nest sites are not active, no seasonal restrictions are required.	<u>All Alternatives:</u> All Applicable Units	Bald and Golden Eagle Act
Wildlife-9	If occupied northern goshawk nest sites are discovered, no burning or use of heavy equipment will occur within 0.25 miles of the nest site between March 1st and August 31st. If protocol surveys are conducted and the site is found to be unoccupied, proposed actions may proceed.	<u>All Alternatives:</u> All Applicable Units	Forest Plan S&G 8-20
Wildlife-14	Pre-disturbance surveys for Category A survey and manage species will be completed to protocol prior to ground-disturbing activities where suitable habitat exists. Known mollusk sites will be flagged and buffered by one site tree height by the District biologist prior to implementation. No treatments will occur within this buffer; flagged areas will be used as "skips" considered in variable density thinning prescriptions.	<u>All Alternatives:</u> Unit 134-2S	Forest Plan S&G 8-18, ROD for Survey and Manage species
Wildlife-17	<p>In order to minimize potentials impacts to gray wolf:</p> <p>If a den site is detected in or near the project area during the project implementation timeframes, a seasonal restriction from April 1 through June 30 will be applied to restrict noise- and smoke-generating activities that are above ambient standards within one mile of the den.</p> <p>While the provision for the seasonal restriction for the den site is expected to provide protection from any prolonged or substantial project-related disturbance during the critical pup-rearing period at early rendezvous site(s), a similar seasonal restriction for activities within one mile of any discovered active rendezvous sites from April 1 through August 31 will be implemented. Further discussions and coordination with U.S. Fish and Wildlife Service may result in modified distances or more flexible dates for this specific protection measure.</p> <p>These seasonal restrictions will be implemented unless there are topographic features or terrain that clearly separates the noise- or smoke- generating activity from the den or rendezvous site(s).</p> <p>While there are no known den or rendezvous site(s) associated with the Craggy Project area at this time, this project design feature will be implemented and coordination with U.S. Fish and Wildlife Service will take place if den or rendezvous sites are confirmed.</p>	<u>All Alternatives:</u> All Applicable Units	Forest Plan S&G 8-1, 8-2

