

**2004 Sierra Nevada Forest Plan Amendment - Record of Decision
Lower Westside Hardwood Forest Ecosystems**

Goals for lower westside hardwood forest ecosystems include establishing and maintaining;

a diversity of structural and seral conditions in landscapes in proportions that are ecologically sustainable at the watershed scale;

sufficient regeneration and recruitment of young hardwood trees over time to replace mortality of older trees; and

sufficient quality and quantity of hardwood ecosystems to provide important habitat elements for wildlife and native plant species.

Strategic Hardwood Management Objectives	
<p>During mechanical vegetation treatments, prescribed fire, and salvage operations, retain all large hardwoods on the westside except where: (1) large trees pose an immediate threat to human life or property or (2) losses of large trees are incurred due to prescribed or wildland fire. Large montane hardwoods are trees with a dbh of 12 inches or greater. Large blue oak woodland hardwoods are trees with a dbh of 8 inches or greater. Allow removal of larger hardwood trees (up to 20 inches dbh) if research supports the need to remove larger trees to maintain and enhance the hardwood stand (ROD at page 53).</p>	<p>General guidelines for large-snag retention are as follows:</p> <ul style="list-style-type: none"> · Westside hardwood ecosystems - four of the largest snags (hardwood or conifer) per acre · Where standing live hardwood trees lack dead branches - six of the largest snags per acre (where they exist to supplement wildlife needs for dead material)(ROD at page 51).
<p>Include hardwoods in stand examinations. Encourage hardwoods in plantations. Promote hardwoods after stand-replacing events. Retain buffers around existing hardwood trees by not planting conifers within 20 feet of the edge of hardwood tree crowns (ROD at page 53).</p>	<p>Where young plantations (generally Pacific Southwest Region size classes 0x, 1x, 2x) are included within area treatments, apply the necessary silvicultural and fuels reduction treatments to: (3) promote hardwoods...Appendix A: Fire Standards and Guidelines at page 360.</p>
<p>To protect hardwood regeneration in grazing allotments, allow livestock browse on no more than 20 percent of annual growth of hardwood seedlings and advanced regeneration. Modify grazing plans if hardwood regeneration and recruitment needs are not being met (ROD at page 55).</p>	<p>Specialized Prescription: Rx –18 and 19: Hardwod: Fuel treatment for woodland [mainly live oak] type. Most Black oak –conifer type is subject to the same treatments as mature conifers. When mechanical treatments are used, no blue oaks over 8-inch and no other hardwood over 12-inch can be removed. Prescribed fire is the most common method used here. Appendix B: Modeling Outputs and Effects at page 405.</p>

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Appendix A: Standards and Guidelines**

Oaks/Hardwoods - Forest Wide

Maintain and enhance hardwood ecosystems	Manage hardwood ecosystems for a diversity of hardwood tree size classes within a stand, such that seedlings, saplings and pole size trees are in sufficient abundance to replace large trees that die.
Maintain and enhance critical wildlife habitat elements.	Retain the mix of mast producing species where they exist within a stand.
Maintain or enhance distribution of hardwood ecosystems.	Retain all blue oak and valley oak trees except where National Forests have developed stand restoration strategies calling for tree removal, or where lost due to fire, or as needed for public health and safety.
Maintain and enhance biodiversity in lower westside ecosystems.	Consider risk of noxious weed spread, and minimize impacts to hardwood ecosystem structure and biodiversity in prescribed fire planning documents and in application of mechanical fuel treatments.
Maintain and enhance critical wildlife habitat elements.	During mechanical vegetation treatments, prescribed fire and salvage operations retain all large hardwood trees on the west side except where trees pose an immediate threat to human life or property, or where losses are incurred due to prescribed or wild fire. Large montane hardwoods are defined as having a dbh 12 inches or greater, blue oak woodland species are defined as having a dbh 8 inches or greater. Removal of larger hardwood trees (up to 20" dbh) would be permitted if research supports that it is necessary for maintenance and enhancement of the hardwood stand.
Maintain or enhance distribution of hardwood ecosystems.	Where commercial and noncommercial hardwood fuelwood and sawlog cutting in hardwood ecosystems are permitted, pre-mark or pre-cut hardwood trees to ensure stand goals are met. Retain a diverse distribution of stand cover classes.
Improve information base for hardwood species	During or prior to landscape analysis, spatially determine distributions of existing and potential natural hardwood ecosystems (FSH 2090.11). Assume pre-1850 disturbance levels for potential natural community distribution. Work with Province Ecologists or other qualified personnel to map and, or model hardwood ecosystems at the landscape scale (30,000-50,000 acres). Include the following items in the analysis; 1) compare distributions of potential natural and existing hardwood ecosystems, 2) Identify locations where existing is outside the natural range of variability for potential natural community, 3) identify hardwood restoration and enhancement projects.
Retain role of hardwoods in nutrient cycling and soil building	Include hardwoods in stand exams. Encourage hardwoods in plantations. Promote hardwoods after stand replacing events. Buffer around existing hardwood trees by not planting conifer trees within 20 feet from edge of hardwood crown canopy.