Fire Regime Condition Class (FRCC) Interagency Handbook
Reference Conditions

Date: 6/8/04
PNVG Code: MCON

Potential Natural Vegetation Group: California Mixed Conifer (i.e., “Mixed Conifer” as per Kuchler [1964] and Schmidt et al. [2002]).

Geographic Area: California, southwestern Oregon.

Description: PNVG is a montane forest type in the Sierra Nevada- and Coastal Ranges, extending northward into the Klamath Mountains and Southern Cascades. PNVG occupies a wide variety of terrain ranging from relatively dry- to mesic sites on gentle- to moderately steep slopes, generally between 2000 and 6000 feet elevation. Stands range from open- to relatively densely stocked and typically are dominated by various admixtures of early- to mid seral species such as sugar pine, ponderosa pine, Douglas-fir, white fir, incense cedar, and California black oak, depending on site type and fire history. Stand understories range from open to moderately dense, and usually are dominated by shrubs such as manzanita spp., ceanothus spp. (e.g., deerbrush), bear clover, dogwood, and thimbleberry.

Fire Regime Description: Regimes I and III; primarily short-interval (e.g., 10-20 yr) surface fires with occasional mixed severity- and replacement fires (e.g., 30-100 yr intervals).

Vegetation Type and Structure

<table>
<thead>
<tr>
<th>Class</th>
<th>Percent of Landscape</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: post replacement</td>
<td>10</td>
<td>Early succession after moderately long-interval replacement fires (rare in PNVG); sites dominated by grasses, shrubs, and tree seedling- to sapling stages</td>
</tr>
<tr>
<td>B: mid-development closed</td>
<td>10</td>
<td>Mixed conifer saplings to medium sized trees (&gt; 40% canopy cover)</td>
</tr>
<tr>
<td>C: mid- open</td>
<td>25</td>
<td>Mixed conifer saplings to medium sized trees, often with substantial amounts of Calif. black oak (&lt;40% canopy cover).</td>
</tr>
<tr>
<td>D: late- open</td>
<td>40</td>
<td>Overstory of large and very large diameter</td>
</tr>
</tbody>
</table>
mixed conifer species (<40% canopy cover) in small- to moderate size patches, generally on southerly aspects and ridgetops; Stands often contain substantial amounts of ponderosa pine.

E: late-closed 15
Overstory of large and very large diameter mixed conifer species (>40% canopy cover), in small- to large size patches, particularly on steep northerly aspects and lower slopes; Stand overstories often dominated by white fir and/or Douglas-fir, with understories dominated by pole- to medium size shade tolerant conifers.

Total 100

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### Fire Frequency and Severity

<table>
<thead>
<tr>
<th>Fire Frequency-Severity</th>
<th>Modeled Probability</th>
<th>Pct, All Fires</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replacement Fire</td>
<td>.01</td>
<td>15</td>
<td>Rare; primarily in classes E and B.</td>
</tr>
<tr>
<td>Non-Replacement Fire</td>
<td>.055</td>
<td>85</td>
<td>80% surface fires (15-20 yr MFI); 20% mixed severity fires (30-50 yr MFI); all successional classes</td>
</tr>
</tbody>
</table>

All Fire Frequency* .065 100

*Sum of replacement fire and non-replacement fire probabilities.

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**References**


Taylor, Alan H. 2000. Fire regimes and forest changes in mid and upper
montane forests of the southern Cascades, Lassen Volcanic National Park,

Taylor, Alan H.; Skinner, Carl N. 1998. Fire history and landscape dynamics in a
late successional reserve, Klamath Mountains, California, USA. Forest Ecology
and Management 111: 285–301.

U.S. Department of Agriculture, Forest Service, Rocky Mountain Research
Station, Fire Sciences Laboratory (2002, December). Fire Effects Information
9/20/03).