

****11/4/03 DRAFT****

**Fire Regime Condition Class (FRCC) Interagency Handbook
Reference Conditions**

Modeler: Doug Havlina

Date: 8/14/03

PNVG Code: PPDF1

Potential Natural Vegetation Group: Ponderosa Pine-Douglas-fir (Inland Northwest).

Geographic Area: Columbia Plateau, Northern Rockies, and Great Basin.

Description: Potential natural vegetation group widespread throughout the interior western United States. Typical sites for this PNVG are mountain slopes, ridges, and foothills. This type often forms a matrix with pure Douglas-fir, ponderosa pine, grand fir, mixed conifer, or shrub PNVGs, depending on edaphic, moisture, and insolation variables. Sites generally support co-dominant, fire-maintained mix of ponderosa pine and Douglas-fir, although ponderosa pine is favored in the most frequent-fire environments. In this PNVG, Douglas-fir attains fire resistance at roughly 40 years. Under the historic disturbance regime, typical stand densities are reduced to 15-50 stems per acre following self-thinning and frequent burning. Shrubs common to this PNVG include, bitterbrush, ceanothus, scouler willow, snowberry, sagebrush, spirea, huckleberry, and ninebark species. Common herbaceous associates include elk sedge, pinegrass, Idaho fescue, bluebunch wheatgrass, mountain brome, arnica, yarrow, arrowleaf balsamroot, and lupine. Most perennial vegetation sprouts following low intensity surface fire, maintaining a diverse understory assemblage.

Fire Regime Description: Fire Regime I, primarily short-interval (e.g., <25 yr) surface fires.

Vegetation Type and Structure

Class	Percent of Landscape	Description
A: post replacement	15	Grass and forb dominated community, with sprouting shrubs and conifer saplings emerging
B: mid-development closed	10	Dense pole to large sized, multi-storied forest, often with a diverse shrub layer
C: mid- open	25	Open pole to large sized forest, often with a mixed herbaceous understory (pinegrass/elk sedge) and shrub layer

D: late- open	40	Open, late-seral fire-maintained forest co-dominated by Douglas-fir and ponderosa pine
E: late- closed	10	Closed, multi-storied late-seral forest, showing signs of insect or disease attack and mortality resulting from competition
Total	100	

Fire Frequency and Severity

Fire Frequency-Severity	Modeled Probability	Pct, All Fires	Description
Replacement Fire	.011	24	Lethal crown fire causing greater than 90% overstory mortality among co-dominant Douglas-fir and ponderosa pine
Non-Replacement Fire	.035	76	Non-lethal and mixed severity fires which consume surface fuels and result in patchy overstory mortality
All Fire Frequency*	.046	100	

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

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VDDT RESULTS







