5/6/04 DRAFT*

(*Note: Data below will not appear in FRCC software until Summer 2004 [Version 1.1.0])

Fire Regime Condition Class (FRCC) Interagency Handbook Reference Conditions

Modelers: Wendel Hann, Reese Lolley, Cecilia McNicoll **Date:** 5/6/04 **PNVG Code:** OCWI

Potential Natural Vegetation Group: Oak & Conifer Woodlands Interior Southwest

Geographic Area: Southern Arizona, southern New Mexico, western Texas.

Description: Vegetation type is often referred to as being within the Madrean province; these landscapes are dominated by open evergreen oaks, alligator bark junipers, and Mexican pines ranging from 15 to 50 feet high, with a grass-dominated understory; type usually occupies foothills and mountains ranging from about 3000 to 7000 ft (1200-2200 m) elevation, and occurs in a zone between the warmer and dryer Plains Mesa Grassland at lower elevations and the moister Woodland-Grassland Complex on slopes/mesas at higher elevations; climate generally consists of mild winters and wet summers with mean annual precipitation ranging from about 10 to 25 inches; half of the precipitation typically occurs in summer, with the remainder occurring during winter/spring.

Fire Regime Description: Regime I (frequent surface- and mixed severity fires) with fire intervals generally ranging from 5-20 years long (approx. 10-yr MFI; Brown and Smith 2000, USDA 2002). Large-diameter alligator junipers and evergreen oaks often survive 1 to 3 low intensity fires resulting in “cat face” scars with char at the base of the tree, whereas Mexican pines can survive multiple low intensity fires. Fire severity can be mixed in both space and time, for example, high-severity fires can occur on relatively productive sites, or during extreme fire weather and prolonged droughts.

Vegetation Type and Structure

Class	*Percent of Landscape*	*Description*
A: Early-seral post-fire grass-forb	10	Post-fire grass and fire-adapted forbs: herbaceous life form with 10-30 % canopy and 20% average; mountain muly, blue grama, sideoats grama, asters, penstemons, sprouting shrubs
B: Mid-seral tree-shrub/grass	20	Mid-seral woodland, typically in more productive draws and northerly aspects: woodland life form with 15-70% canopy, average of 55%; alligator juniper, oaks, mahogany, mountain muly, blue grama
C: Mid-seral open	25	Mid-seral grasslands on southerly slopes & ridges:

grass with scattered shrubs and trees		grass dominated herbaceous life form with species such as mountain muhly, blue grama, and sideoats grama; 25-65% herbaceous cover; 5-15% canopy of scattered trees and shrubs, such as alligator juniper, oaks;
D: Late-seral open tree-shrub/grass	30	Late-seral open woodland on slopes & ridges: woodland life form with 5-35% canopy, 25% average; alligator juniper, oaks, mountain muly, blue grama, sideoats grama;
E: Late-seral closed tree-shrub/grass	15	Late-seral closed woodland typically in draws or on steep rocky or thin soil slopes & ridges: woodland life form with 35-70% canopy, average of 55%;alligator juniper, oaks, mahogany, scattered shrubs and grasses
Total	100	

Fire Frequency and Severity

Fire Frequency-Severity	*Modeled Probability*	*Pct, All Fires*	*Description*
Replacement Fire	.03	33	Primarily stand replacmt. in E and B
Non-Replacement Fire	.062	67	Primarily maintenance in A, C, and D
All Fire Frequency*	.092	100	

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

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