

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

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

**Modeler:** Wendel Hann

**Date:** 10/24/03

**PNVG Code:** PRAR3

**Potential Natural Vegetation Group:** Prairie Grassland With Shrubs

**Geographic Area:** Occurs in the Great Plains from the Dakotas south to Texas.

**Description:** This type typically occurs on flats, in draws, or on stony and gravelly rolling uplands of the Great Plains. Vegetation is tall grass dominated big bluestem, other tall grasses, western wheatgrass, grama grasses, with intermingled forbs and scattered patches of shrubs, such as oaks. This type correlates with Kuchler's (1964) types 70, 74, 75, and 76.

**Fire Regime Description:** Fire regime group II, frequent replacement. The mean fire interval is about 8 years with moderate variation due to year-to-year variation in grass production related to drought and moisture cycles. Grazing of the grassy fuels by large ungulates increases the variation of the fire interval.

**Vegetation Type and Structure of Fire Regime Group II**

Class	Percent of Landscape	Description
A: post replacement	2	Dominated by resprouts and seedlings of grasses and post-fire associated forbs. Low to medium height with variable canopy cover. This type typically occurs where fires burn relatively hot in classes B and C.
B: mid-development closed	50	Greater than 35 percent herb cover. Generally associated with more productive soils, but can be caused by cumulative high moisture seasons increasing the cover and productivity of class C. Tall in height.
C: mid- open	45	Less than 35 percent herb cover. Generally associated with less productive cobbly and gravelly soils, but can also be caused by cumulative drought shifting class B to this class. Tall in height.
D: late- open	3	5 to 15 percent shrub cover of medium height. Typically located on the ridges, rocky areas, or on the more cobbly or gravelly soils where patches may be missed by fire. Grass is tall in height with shrub height varying from medium to tall.
E: late- closed		
Total		100

**Fire Frequency and Severity**

Fire Frequency-Severity	Modeled Probability	Percent, All Fires	Description
Replacement Fire	.105	85	Replacement fires in A, B and C
Non-Replacement Fire	.020	15	Mosaic fires in classes B, C, and D
All Fire Frequency*	.125	100	8 year mean fire frequency with high variation due to complex interaction of drought cycles, herbivory, and Native American Burning

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

## **References**

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Schmidt, Kirsten M, Menakis, James P., Hardy, Colin C., Hann, Wendel J., Bunnell, David L. 2002. Development of coarse-scale spatial data for wildland fire and fuel management. Gen. Tech. Rep. RMRS-GTR-87. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 41 p. + CD.

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# VDDT Results



