

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

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

**Modeler:** Wendel Hann

**Date:** 9/25/03

**PNVG Code:** DSHB4

**Potential Natural Vegetation Group:** Desert Shrubland (Without Grasses)

**Geographic Area:** Occurs in the Southwest, Southern Great Plains, Great Basin, and California geographic areas.

**Description:** This type typically occurs on upland flats, benches, gentle slopes or well drained valley and draw bottoms in areas with less than 10 inches precipitation. Vegetation is shrubland dominated by creosote bush, bur sage, opuntia, and palo verde, with intermingled forbs. This type correlates with Kuchler's (1964) types 41, 42, 43, and 46.

**Fire Regime Description:** Fire regime group III, infrequent mixed. The mean fire interval is about 75 years with high variation due to year to year variation in drying of shrub foliage, shrub mortality, and forb production related to drought and moisture cycles combined with variation in ignitions and associated fire weather. Fire years are typically correlated with high spring moisture years in geographic areas dominated by cool season moisture and high summer moisture in areas dominated by monsoon season rains.

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

Class	Percent of Landscape	Description
A: post replacement	5	Dominated by resprouts and seedlings of shrubs and post-fire associated forbs. This type typically occurs where fires burn relatively hot in classes B and C.
B: mid-development closed	15	Greater than 15 percent shrub cover and 10-20 percent herb cover; generally associated with more productive soils. Effects of cumulative drought can cause a shift from this class to class C.
C: mid- open	80	Less than 15 percent shrub cover and less than 10 percent herb cover generally associated with less productive cobbly and gravelly soils. Effects of cumulative drought can cause a shift from class B to this class.
D: late- open		
E: late- closed		

Total 100

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<b>Fire Frequency and Severity</b>			
Fire Frequency-Severity	Modeled Probability	Percent , All Fires	Description
Replacement Fire	.007	55	Replacement fires in B and C
Non-Replacement Fire	.006	45	Mosaic fires in classes B and C
All Fire Frequency*	.013	100	75 year mean fire frequency with high variation due to complex interaction of drought cycles and herbivory

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

### References

Brown, James K.; Smith, Jane Kapler, eds. 2000. Wildland fire in ecosystems: effects of fire on flora. Gen. Tech. Rep. RMRS-GTR-42-vol. 2. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 257 p.

Kuchler, A. W. 1964. Manual to accompany the map of potential natural vegetation of the conterminous United States. American Geographical Society. Spec. Publ. No. 36. Lib. Congress Cat. Card Num. 64-15417. 156 p.

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.

U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (2002, December). Fire Effects Information System, [Online]. Available: <http://www.fs.fed.us/database/feis/> (User supply access date).

MODELER FIELD REVIEWS: \*SPECIFIC LOCN?  
Wendel Hann - Nevada 2000, Utah 2001, Wyoming 2002

# VDDT Results



