

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

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

Modeler: Wendel Hann

Date: 9/25/03

PNVG Code: DSHB2

Potential Natural Vegetation Group: Desert Shrubland with Grasses

Geographic Area: Southwest, Southern Great Plains, Colorado Plateau, and Great Basin and scattered within the Southern Rocky Mts.

Description: This type typically occurs on upland flats, benches, gentle slopes or well drained valley and draw bottoms. Vegetation is shrubland dominated by blackbrush, creosote bush, tarbush, mormon tea, sand sage, three awn, tobosa grass, galleta grass, and black grama with intermingled forbs. This type correlates with Kuchler's (1964) types 39, 44, 57, and 58.

Fire Regime Description: Fire regime group III, infrequent mixed. The mean fire interval is about 45 years with high variation due to year to year variation in grass production related to drought and moisture cycles. 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. 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	10	Dominated by resprouts and seedlings of shrubs and grasses 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 20-40 percent grass and forb cover; generally associated with more productive soils. Effects of cumulative drought can cause a shift from this class to class C.
C: mid- open	75	Less than 15 percent shrub cover and less than 20 percent grass and forb 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

Fire Frequency and Severity

Fire Frequency-Severity	Modeled Probability	Percent , All Fires	Description
Replacement Fire	.014	60	Replacement fires in B and C
Non-Replacement Fire	.009	40	Mosaic fires in classes B and C
All Fire Frequency*	.023	100	45 year mean fire frequency with high variation due to complex interaction of drought cycles and herbivory

*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 (if applicable): *SPECIFIC LOCN?
Wendel Hann - Nevada 2000, Utah 2001, Wyoming 2002

VDDT Results



