11/4/03 DRAFT

Fire Regime Condition Class (FRCC) Interagency Handbook Reference Conditions

Modeler: Ayn Shlisky Date: 8/11/03 PNVG Code: CAST1

Potential Natural Vegetation Group: California Steppe Grassland (Without

Shrubs or Trees).

Geographic Area: California

Description: Valley grasslands and coastal prairies from sea level to 3000'

elevation.

Fire Regime Description: Fire Regime Group II, primarily frequent (e.g., <5 yr)

stand replacement fires.

Vegetation Type and Structure

Class	Percent of	Description	
	Landscape		
A: post	30	Post-stand replacement dominated by annual	
replacement		grasses and forbs	
B: mid-	40	>40% perennial grass cover; annual grasses	
development		and forbs in interstitial spaces	
closed			
C: mid- open	30	<40% perennial grass cover; annual grasses	
		and forbs in interstitial spaces	
D: late- open	N/A	N/A	
E: late- closed	N/A	N/A	
Total	100		

Fire Frequency and Severity

Fire Frequency-	Modeled	Pct, All	Description
Severity	Probability	Fires	
Replacement Fire	.20	100	
Non-Replacement			
Fire			
All Fire Frequency*	.20	100	

^{*}Sum of replacement fire and non-replacement fire probabilities.

^{**} Note: VDDT pathway "Optional1" refers to effects of native herbivores.

References

Bartolome, J. W. 1987. California annual grassland and oak savannah. Rangelands 9(3): 122-125.

Bartolome, J. W. 1989. Local temporal and spatial structure. Grassland Structure and Function: California Annual Grassland. L. F. Huenneke and H. A. Mooney. Boston, Kluwer Academic Publishers: 221.

Biswell, H. H. 1956. Ecology of California Grasslands. Journal of Range Management 9: 19-24.

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.

George, M. R., J. R. Brown, et al. 1992. Application of nonequilibrium ecology to managment of Mediterranean grasslands. Journal of Range Management 45: 436-440.

Hardy, Colin C., Kirsten M. Schmidt, James P. Menakis, R. Neil Samson. 2001. Spatial data for national fire planning and fuel management. Int. J. Wildland Fire. 10(3&4): 353-372.

Heady, H. F.. 1977. Valley Grassland. In: Barbour, Michael G.; Major, Jack, eds. Terrestrial Vegetation of California. New York: John Wiley and Sons: 491-514.

Huenneke, L. F. 1989. Distribution and regional patterns of California grasslands. Grassland Structure and Function: California Annual Grassland. L. F. Huenneke and H. A. Mooney. Boston, Kluwer Academic Publishers: 221.

Huenneke, L.F. and Mooney, H.A. (eds). 1989. Grassland structure and function. Tasks for vegetation science 20. Kluwer Academic Publishers, Dordrecht, The Netherlands. 221 pp.

McNaughton, S. J. 1968. Structure and function in California grasslands. Ecology 49(5): 962-972.

Parsons, D. J. and T. J. Stohlgren 1989. Effects of varying fire regimes on annual grasslands in the Southern Sierra Nevada of California. Madrono 36(3): 154-168.

Paysen, T.E., Ansley, R.J., Brown, J.K., Gottfried, G.J., Haase, S.M., Harrington, M.G., Narog, M.G., Sackett, S.S., Wilson, R.C. 2000. Fire in western shrubland, woodland and grassland ecosystems. In: Brown, James K.; Smith, Jane Kapler, eds. 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: 121-160.

Pitt, M. D. and H. F. Heady 1978. Responses of annual vegetation to temperature and rainfall patterns in Northern Calfiornia. Ecology 59(2): 336-350.

Rice, K. J. 1989. Competitive interactions in California annual grasslands. Grassland Structure and Function: California Annual Grassland. L. F. Huenneke and H. A. Mooney. Boston, Kluwer Academic Publishers: 221.

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/ [Accessed 1/03].

VDDT Results:





