

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

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

Modeler: Steve Barrett

Date: 9/18/03

PNVG Code: GFDF

Potential Natural Vegetation Group: Grand fir-Douglas-fir.

Geographic Area: Inland Northwest (Idaho, eastern Oregon and Washington, western Montana).

Description: This PNVG is a mesic montane type in the Northern Rockies and east-side Cascades, occupying gentle- to moderately steep slopes (e.g., 2000-4500 ft. elev. range). Stand overstories range from relatively open- to densely stocked, and usually are dominated by early- to mid seral species such as western larch, Douglas-fir, and western white pine; grand fir regeneration increases markedly during mid- to late successional stages. Stand understories range from moderately open to dense, and are dominated by various mixes of shrubs and forbs such as queencup beadlilly, twinflower, wild ginger, ninebark, oceanspray, mountain maple, globe huckleberry, and beargrass.

Fire Regime Description: Fire Regimes III and IV, primarily moderately long-interval (e.g., 50-100 yr) mixed severity fires.

Vegetation Type and Structure

Class	Percent of Landscape	Description
A: post replacement	15	Early succession after moderately long-interval replacement fires
B: mid-development closed	45	Primarily shade intolerant conifer saplings to poles (> 40% canopy cover)
C: mid- open	10	Primarily shade intolerant conifer saplings to poles (<40% canopy cover)
D: late- open	5	Pole- and larger diameter shade intolerant- and mixed conifer species (<40% canopy cover) in small- to moderate size patches, generally on southerly aspects
E: late- closed	25	Pole- and larger diameter shade intolerant- and mixed conifer species (>40% canopy cover), in moderate- to large size patches, particularly on steep northerly aspects

Total 100

Fire Frequency and Severity			
Fire Frequency-Severity	Modeled Probability	Pct, All Fires	Description
Replacement Fire	.005	30	Primarily in classes B-E on relatively steep terrain.
Non-Replacement Fire	.012	70	Primarily in classes C-D, esp. on non-steep terrain.
All Fire Frequency*	.017	100	

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

References

Barrett, Stephen W. 1993. Fire regimes on the Clearwater and Nez Perce National Forests, north-central Idaho. Unpub. final report, Purchase Order No. 43-0276-3-0112; Fire Management Division, Nez Perce National Forest, Grangeville, ID. 56 p.

Barrett, Stephen W. 2002. A fire regimes classification for Northern Rocky Mountain forests: Results from three decades of fire history research. Unpub. final report, Purchase Order No. 43-0385-1-0019; Planning Division, Flathead National Forest, Kalispell, MT. 38 p.

Barrett, Stephen W.; Arno, Stephen F. 1991. Classifying Fire Regimes and Defining Their Topographic Controls in the Selway Bitterroot Wilderness. pp. 299-307 In: Proceedings from the 11th Conference on Fire and Forest Meteorology; 1991 April 16-19, Missoula, MT. Bethesda, MD: Society of American Foresters: 299-307.

Barrett, Stephen W.; Ingebretson John C. 2000. How to build a fire exclusion map. Fire Mgt. Today 60(2): 26-30.

Barrett, Stephen W.; Arno, Stephen F.; Menakis, James P. 1997. Fire Episodes in the Inland Northwest (1540-1940) based on fire history data. Gen. Tech. Rept. INT-GTR-370, Intermountain Research Sta., Ogden UT, 17 p.

Brown, James K.; Arno, Stephen F.; Barrett, Stephen W.; Menakis, James P. 1994. Comparing the Prescribed Natural Fire Program with presettlement fires in the Selway-Bitterroot Wilderness. International Journal of Wildland Fire 4(3): 157-168.

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.

Heyerdahl, Emily K. 1997. Spatial and temporal variation in historical fire regimes of the Blue Mountains, Oregon and Washington: The influence of climate. Seattle, WA: University of Washington. PhD Dissertation. 99 p.

Morgan, Penelope; Bunting, Steven C.; Black, A.; Merrill, T.; Barrett, Stephen, W. 1998. Fire regimes in the Interior Columbia River Basin: Past and Present. Pp. 77-82 In *Proc. Fire mgt. under fire (adapting to change)*; 1994 Interior West Fire Council Meeting, Internatl. Assoc. Wildland Fire, Fairfield, WA.

Quigley, Thomas M.; Haynes, Richard W.; Graham, Russell T., tech. eds. 1996. Integrated scientific assessment for ecosystem management in the Interior Columbia Basin and portions of the Klamath and Great Basins. Gen. Tech. Rep. PNW-GTR-382, Portland OR: U.S. Department Agriculture, Forest Service, Pacific Northwest Research Station. 303 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/> (Accessed 9/17/03).

PERSONAL COMMUNICATION: Jeff Jones, Landscape Ecologist, Flathead National Forest, 9/18/03.

VDDT Results





