11/4/03 DRAFT

Fire Regime Condition Class (FRCC) Interagency Handbook Reference Conditions

Modeler: Brad Smith Date: 8/13/03 PNVG Code: GBPI

Potential Natural Vegetation Group: Great Basin Pine (NV, UT)

Geographic Area: Great Basin.

Description: Subalpine woodlands on isolated mountain ranges and peaks in the Great Basin of Nevada and Utah typically on south-facing ridges and talus. Soils are extremely limited, solar radiation intense, growing season very short.

Comment – This reference condition required several consecutive VDDT runs to reach a stable condition. Since each run was 1000 time steps (each step 1 year in this application), the time needed to reach a stable condition approaches that for significant climate change. Rates of intrinsic change in these stands are extremely slow.

Fire Regime Description: Fire Regimes III and V; long-interval (e.g., >400 yr) mixed severity- and stand replacement fires.

Vegetation Type and Structure

| Class | Percent of | Description | |
|----------------------------------|------------|---|--|
| | Landscape | • | |
| A: post replacement | 25 | Bare ground and talus with sparse ground cover of forbs, grasses, and low and prostrate shrubs. | |
| B: mid- development closed | N/A | N/A | |
| C: mid- open | 10 | Open woodland <40% crown closure of seedlings and saplings | |
| D: late- open | 55 | Open woodland <40% crown cover, poles and larger trees. Bare ground and talus with sparse ground cover. | |
| E: late- closed | 10 | | |
| Total | 100 | | |

Fire Frequency and Severity

| Fire Frequency- | Modeled | Pct, All | Description |
|---------------------|-------------|----------|-------------------------------|
| Severity | Probability | Fires | • |
| Replacement Fire | .0003 | 12 | |
| Non-Replacement | .0022 | 88 | 70% mosaic, 30% surface burns |
| Fire | | | |
| All Fire Frequency* | .0025 | 100 | |

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

References

Alexander, Robert R.; Ronco, Frank, Jr. 1987. Classification of the forest vegetation on the National Forests of Arizona and New Mexico. Res. Note RM-469. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station. 10 p.

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.

Brown, Peter M.; Kaye, Margot W.; Huckaby, Laurie S.; Baisan, Christopher H. 2001. Fire history along environmental gradients in the Sacramento Mountains, New Mexico: influences of local patterns and regional processes. Ecoscience. 8(1): 115-126.

DeVelice, Robert L.; Ludwig, John A.; Moir, William H.; Ronco, Frank, Jr. 1986. A classification of forest habitat types of northern New Mexico and southern Colorado. Gen. Tech. Rep. RM-131. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station. 59 p.

Eyre, F. H., ed. 1980. Forest cover types of the United States and Canada. Washington, DC: Society of American Foresters. 148 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: 0_/_/03].

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