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

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

Modeler: Wendel Hann Date: 9/26/03 PNVG Code: MGRA3

Potential Natural Vegetation Group: Mountain Grassland With Shrubs

**Geographic Area:** Occurs scattered throughout mountainous areas across the west with largest components in northern California, the Pacific Northwest, and northern Rocky Mountains.

**Description**: This type typically occurs on upland flats, benches, gentle slopes or well drained valley and draw bottoms. Vegetation is grassland dominated by fescues, bluebunch wheatgrass, sedges, tufted hairgrass, and oatgrasses with intermingled forbs and scattered shrubs. This type correlates with Kuchler's (1964) types 47, 50, and 51.

**Fire Regime Description:** Fire regime group II, frequent replacement. The mean fire interval is about 20 years. Fire years are typically correlated with drought years associated with fires in the adjacent forests. 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 | Description   |  |
|---------------------------|------------|---|--|
|                           | Landscape  |   |  |
| A: post replacement       | 5          | Dominated by resprouts and seedlings of grasses and post-fire associated forbs. This type typically occurs where fires burn relatively hot in classes B and C.  |  |
| B: mid-development closed | 90         | Greater than 40 per cent grass and forb cover. Less than 5% shrub cover.  |  |
| C: mid- open              | 5          | Greater than 5 percent shrub cover. The primary shrub species that occur scattered within this type include sagebrush and shrubby cinquefoil, but other species common to the mountain shrub zone, such as chokecherry, rose, and serviceberry can occur. |  |
| D: late- open             |            |   |  |
| E: late- closed           |            |   |  |
| Total                     | 100        |   |  |

Fire Frequency and Severity

| ine inequality and ecromy |             |           |                              |  |  |
|---------------------------|-------------|-----------|------------------------------|--|--|
| Fire Frequency-           | Modeled     | Percent,  | Description                  |  |  |
| Severity                  | Probability | All Fires |                              |  |  |
| Replacement Fire          | .049        | 99        | Replacement fires in B and C |  |  |
| Non-Replacement Fire      | .001        | 1         | Mosaic fires                 |  |  |
| All Fire Frequency*       | .05         | 100       | 20 year mean fire frequency  |  |  |

<sup>\*</sup>Sum of replacement fire and non-replacement fire probabilities.

Optional1 disturbance used in reference value modeling for herbivory.

### 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: <a href="http://www.fs.fed.us/database/feis/">http://www.fs.fed.us/database/feis/</a> \*USER SUPPY ACCESS DATE?.

#### MODELER FIELD REVIEWS:

Wendel Hann - Nevada 2000, Utah 2001, Wyoming 2002 \*NEED MORE SPECIFIC?

## **VDDT Results**





