11/4/03 DRAFT*

Fire Regime Condition Class (FRCC) Interagency Handbook
Reference Conditions

Modeler: Ayn Shlisky **Date: September 4, 2003** **PNVG Code: RIPA**

Potential Natural Vegetation Group: Riparian

Geographic Area: Western United States

Description: Bottomlands and montane riparian forests in a wide variety of climates and ecoregions. Includes black cottonwood (*Populus trichocarpa*), red alder, (*Alnus rubra*), aspen (*Populus tremuloides*) and other riparian communities.

Fire Regime Description:
In general, riparian areas have characteristics that reduce the frequency and severity of fire relative to their surrounding uplands. These characteristics include less steep slopes, surface water, saturated soils, shade, fewer lightning ignitions, cooler air temperatures, lower daily maximum temperatures, higher relative humidity, higher fuel moisture content and lower wind speeds. The fire regimes of forested PNVGs are critical to maintaining adequate large woody debris within embedded riparian areas.

Riparian areas on 1st through 3rd order streams will generally reflect the fire regime of their surrounding Potential Natural Vegetation Groups (PNVG). For riparian areas within any particular PNVG, the percentage of riparian area or length in any vegetation class (A-E) should be similar to its respective surrounding PNVG. Where available moisture or topography create fuel conditions that are substantially moister or less flammable than the surrounding PNVG, these systems will generally have less frequent and less severe fire regimes than the surrounding PNVG. In these cases, the percentage of riparian area or length in early seral or open conditions (classes A, C and D) will likely be less than the surrounding PNVG, and the percentage of riparian area or length in closed conditions (classes B and E) will likely be more than the surrounding PNVG.

Riparian areas on 4th + order streams will in general have less frequent and less severe fire regimes than the surrounding PNVG. In these cases, the percentage of riparian area or length in A, C and D will likely be less than the surrounding PNVG, and the percentage of riparian area or length in B and E will likely be more than the surrounding PNVG.

Bear in mind the role of other disturbance processes (e.g., flooding) in the maintenance of natural vegetation mosaics and fuels along riparian areas.

Vegetation Type and Structure

Reference conditions for riparian areas should be considered within the context of the surrounding upland PNVGs and the width of the riparian area or stream order. Riparian systems within landscapes may cross multiple PNVGs.

Class	1st – 3rd Order Streams: Percent of Riparian Length	4th + Order Streams: Percent of Riparian Length
A: post replacement	Similar to surrounding PNVG	Less than surrounding PNVG
B: mid-development closed		More than surrounding PNVG
C: mid- open		Less than surrounding PNVG
D: late- open		
E: late- closed		More than surrounding PNVG
Total	100	100

Fire Frequency and Severity

Fire Frequency-Severity	Fire probability 1st – 3rd Order Streams	Fire probability 4th + Order Streams
Replacement Fire	Similar to surrounding PNVG	Lower proportion of total fire frequency than surrounding PNVG; similar to surrounding PNVG when replacement fire mostly occurs in surrounding PNVG during extreme droughts/wind events
Non-Replacement Fire		Greater proportion of total fire frequency than surrounding PNVG
All Fire Frequency*		Less than surrounding PNVG

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

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VDDT Results
(*NOTE: VDDT modeling is infeasible for this PNVG*).

**NO PHOTOS EITHER?