Fire Regime Condition Class (FRCC) Interagency Handbook
Reference Conditions

Modeler: Doug Havlina  Date: 8/14/03  PNVG Code: PPIN9

Potential Natural Vegetation Group: Ponderosa Pine (Black Hills).

Geographic Area: Southern and eastern Montana, northern Wyoming, western North Dakota.

Description: PNVG occurs in landscape mosaic with plains grasslands, juniper, and sagebrush types on flat and gentle south-facing slopes. Historically, found with mixture of western bunchgrass and plains grassland communities.

Fire Regime Description: Fire Regime I, primarily short-interval (e.g., <25 yr) surface fires.

Vegetation Type and Structure

<table>
<thead>
<tr>
<th>Class</th>
<th>Percent of Landscape</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: post replacement</td>
<td>10</td>
<td>Grass and forb dominated community following fire and grazing effects</td>
</tr>
<tr>
<td>B: mid-development</td>
<td>15</td>
<td>Dense mid-development forest; pole to large pole size trees susceptible to stagnation. Marginal understory associated with limited site resources.</td>
</tr>
<tr>
<td>closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C: mid- open</td>
<td>25</td>
<td>Open mid-development forest with diverse herbaceous understory. Maintained by frequent burning.</td>
</tr>
<tr>
<td>D: late- open</td>
<td>40</td>
<td>Open late-development forest; widely spaced trees, diverse understory, and limited surface fuels due to frequent burning.</td>
</tr>
<tr>
<td>E: late- closed</td>
<td>10</td>
<td>Dense late-development forest with significant within-stand mortality. Poorly developed understory and substantial surface fuel accumulation.</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Fire Frequency and Severity

<table>
<thead>
<tr>
<th>Fire Frequency-Severity</th>
<th>Modeled Probability</th>
<th>Pct, All Fires</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replacement Fire</td>
<td>.005</td>
<td>12</td>
<td>Crown fire in B and E</td>
</tr>
</tbody>
</table>
Non-Replacement Fire .038 88 Mostly surface fire; limited mosaic fire in B, C, and E
All Fire Frequency* .043 100

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

References


VDVT RESULTS

Class A: Early-Develop, PstRpl

Class C: Mid-Develop, Open

Class D: Late-Develop, Open
Class A: Early-Develop, PstRpl

Class B: Mid-Develop, Clsd

Class E: Late-Develop, Clsd