

DRAFT

Fire Regime Condition Class (FRCC) Interagency Handbook Reference Conditions

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PNVG Code: ASLP

Potential Natural Vegetation Group: Dry-Mesic Pine (Shortleaf pine)

Geographic Area: Southern Appalachians

Description: Potential natural vegetation group common to the Southern Appalachians occupying broader ridge tops and more gently rolling terrain primarily on southern exposures. Generally on sandy soils. Usually found at mid to low elevations <3000 feet. Dominant species (Shortleaf pine) occupies >50% of overstory with mixes, pitch pine, Virginia pine, occasionally eastern white pine, oak and some hickory in the overstory.

Fire Regime Description: Fire regime group I, with frequent surface fires.

Succession: In natural fire regimes shortleaf pine is a stable community with herbaceous (grassy) understories, with a relatively sparse woody shrub layer that is usually oak. In the absence of fire, understory species are often fire-intolerant, shade-tolerant hardwoods such as dogwood, red maple, sassafras, sourwood, blackgum and others. Following overstory replacement events, Virginia pine, if previously a component or in adjacent stands, can quickly replace native shortleaf communities. Other disturbances can result in replacement of shortleaf pine to oaks, other hardwoods or, occasionally, eastern white pine.

Model Assumptions: Class canopy (overstory) definitions: <10% prairie, 11-25% savanna, 26-60% woodland (open) , 61%+ forest (closed)

Vegetation Type and Structure

Class*	Percent of Landscape	Description
A: post replacement	10	Pine and oak reproduction to 15' tall. Community of forbs and perennial grasses. More persistent on dry sites. Openings vary in patch size from a few acres to hundreds of acres. Openings often have scattered live trees.
B: mid-seral closed	15	Mid-seral with closed canopy (>50%) shortleaf pine and pole-sized oak with little or no herbaceous understory.
C: mid- seral open	25	Mid-seral woodland Cover <70%.
D: late- seral open	40	Late-seral woodland pine and oak overstory with perennial grasses and limited shrub community. Cover <70%.
E: late- seral closed	10	Late-seral, closed canopy (>70%) pine-oak dominated overstory community. No herbaceous cover and few shrubs.
Total	100	

*Formal codes for classes A-E are: AESP, BMSC, CMSO, DLSO, and ELSC, respectively.

Fire Frequency and Severity

Fire Severity	Fire Frequency (yrs)	Probability	Percent, All Fires	Description
Replacement Fire	119	.0084	5	Late growing season fire that occurs in drought years
Non-Replacement Fire	5.9	.1691	95	Primarily surface fire in all classes. Some mixed fire.
All Fire Frequency*	5.6	.1776	100	

*All Fire Probability = sum of replacement fire and non-replacement fire probabilities. All Fire Frequency = inverse of all fire probability (previous calculation).

References

U.S. Department of Agriculture, Forest Service, Southern Forest Research Station, Southern Forest Resource Assessment, [Online]. Available: <http://www.srs.fs.fed.us/sustain>

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.

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/>.

VDDT File Documentation

Include screen captures (print-screens) from any of the VDDT graphs that were used to develop reference conditions.







