

Appendix K

Predicted Fire Behavior Associated with Pre- and Post-Treatment of Hazardous Fuels in the Powerline ROW

Predicted and Desired Fire Behavior Associated with Pre- and Post-Treatment of Hazardous Fuels

Predicted Effects of Vegetative and Fuels treatments within treated areas. Both Mechanical and Prescribed fire, and Combined Treatments.	Pre-Treatment Stand or Area conditions	Desired Post- Treatment Stand or Area conditions
Fire Behavior	Mixed Severity. Crown Fire. Individual Tree Torching.	Surface Fire. Reduced potential for Crown Fire. Individual Tree Torching.
Flame Length	Surface Fire 8-10 ft. /8-12ft. (FIL 4 and 5) Crowning 50 Ft. (+) (FIL 6)	Surface Fire 4-5 ft. (FIL 2 and 3) Similar Crown Fire flame lengths. However, reduced amount of Crown Fire.
Spotting	0.5 mile (+) Significant long range spotting.	Decreased amount of spotting. Similar spotting distances.
Rate of Spread	Highly variable due to multiple fire factors. Can be low in closed canopy without ground level wind.	May increase as stands are opened up due to the increase in wind and fine fuels (due to increased herbaceous understory). However, significantly reduced fire intensity.
Fuels Tons/Acre	The primary concern is <u>Spruce/Fir, Douglas fir Mixed Conifer, Pine/Oak, Oak & Mixed Mtn. Shrub</u> The range of fuel loading is highly variable between stands. 20+ up to 40-70 tons/ac	The range of fuel loading will be variable between stands. 7-8 to10+ tons/ac. (Low, 5 tons/ac.) – (High, up to 12-15+ tons/ac.)

Suppression Effectiveness	High degree of Resistance to Control to all suppression methods. Indirect Suppression.	Increased Effectiveness. Particularly with Air Tankers and Dozers. Improved for Hand Crews (FIL 2). Increased Firefighter Safety.
----------------------------------	--	---