

Element 7: Environmental Parameters

Element 7: Prescription (Environmental)	Project Name: Crow Creek			
	Ignition Unit Name: Red Bull			
	Prescription Coverage:			
Weather	Low Fire Behavior (Within Unit)	High Fire Behavior (Within Unit)	Optimal Fire Behavior (Within Unit)	Maximum Fire Behavior (Outside Unit)
Temperature	50	80	70	80
Relative humidity	70	25	30	25
Mid-flame wind speed (mi/h)	3	11	5	15
Mid-flame wind direction (°)	Northerly, NE-NW	Northerly, NE-NW	Northerly, NE-NW	Northerly, NE-NW
20-ft wind speed (mi/h)	7.5	27.5	15.5	37.5
20-ft wind direction (°)	Northerly, NE-NW	Northerly, NE-NW	Northerly, NE-NW	Northerly, NE-NW
Cloud cover (%)	100	0	0	0
Fuel shading from sun (%)	100	0	0	0
Aspect (°)	South (180 degrees)	South (180 degrees)	South (180 degrees)	South (180 degrees)
Slope (%)	5	5	5	40
Fuel Moisture				
1 hour (%)	14	6	8	4
10 hour (%)	16	8	10	6
100 hour (%)	20	12	14	8
1000 hour sound (%)	n/a	n/a	n/a	n/a
Live woody (%)	180	170	170	160
Live herbaceous (%)	100	90	90	80
Duff moisture (%)	n/a	n/a	n/a	n/a
Soil moisture (%)	n/a	n/a	n/a	n/a
KBDI ¹	0	500	300	500
¹ The Keetch-Byram Drought Index (KBDI) is a soil/duff moisture (%) index. It ranges from 0 (no drought) to 800 (extreme drought). A KBDI of 600 indicates that lower litter/duff layers contribute to active fire intensity. A KBDI of 200–400 is typical of late spring, where lower litter/duff layers begin to dry and contribute to fire intensity.				