

FS014 Fire Behaviour Forecast Sept 10

Weather Synopsis

In the wake of another cold frontal passage the upper ridge is building back yet again and with that bringing unseasonably warm weather back to the fire area. Winds will be fairly light throughout the burning day today with W 5G15 in the morning becoming SE 5-10G20 through the afternoon, calming further in the evening. The max temp expected today will be 22C and minimum RH expected is 43%. Though there is a chance of lower RH values if the smoke clears but venting is expected to be problematic today.

Fire Behaviour General

With fairly elevated RH values throughout the burning period today it will serve to keep fire behaviour potential somewhat suppressed. Though C-2 and conifer heavy mixed fuels will be capable of exhibiting torching behaviour, C-2 could even get nearly enough energy to sustain crown fire around peak burn, but RH values should start to climb again in short order limiting the possibility of any intensity class 6 evening runs. Most behaviour observed is expected to be surface fire with some torching.

Safety concerns: Even on days with fairly light winds danger trees can still be an issue. The drought conditions can result in seriously compromised root systems and it does not take much to make those trees fall. Always ensure you are searching your work area for potential danger trees before starting work there and either mitigate or avoid any identified hazards.

Fire Behaviour Specific

Simpson Sep 09 indices (FFMC 85, DMC 113, DC 904) Sep 10 1300 Wx 17C, 55% RH, SE 10G15-20

FFMC	DMC	DC	ISI	BUI	FWI
86	115	909	5	174	22

JeanMR Sep 09 indices (FFMC 90, DMC 63, DC 657) Sep 10 1300 Wx 17C, 55% RH, SE 10G15-20

FFMC	DMC	DC	ISI	BUI	FWI
88	65	662	6	104	24

Fire Behaviour (Using JMR indices)

Fuel Type	Head Fire Intensity (kW/m)	Intensity Class	Fire Type	Rate of Spread (m/min)
C-2	10000	6	Intermittent Crown	8
C-3	1700	3	Surface	2
M-2 75	5600	5	Intermittent Crown	6

Fire Behaviour Analyst Matthew Coyle