

TOPIC 14 FIRE DANGER LEVELS



FIRE DANGER LEVELS Ministry of Environment – Wildfire Management								
	FFMC	DMC	DC	ISI	BUI	FWI		
LOW	<80	<20		<3	<24	<5		
MODERATE	81-85	21-30	<300	4-6	25-40	6-16		
HIGH	86-90	31-40	300-500	7.9	41-60	17-30		
EXTREME	90+	40+	500+	10+	60+	30+		
FFMC	Used to indicate ease of ignition (ignition probability).							
DMC	Used to assist in predicting the probability of lightning hold over fire starts.							
DC	Indicator of long-term drought conditions and depth of burning fire (fire severity). Used in estimating mop-up difficulty.							
BUI	Indicator of the amount of fuel available for combustion and an indicator of fire severity and intensity relating to control problems.							
ISI	Indicator of fire spread greatly affected by wind.							
FWI	Indicator of frontal fire intensity from all above factors.							

FIRE INTENSITY CHART							
Fire	Frontal Fire	Surface I					
Intensity Class	Intensity	Flame Flame Length Height		FWI			
1	<10 kW/m	<0.2 m	<0.1 m	0-3			
2	10 – 500 kW/m	0.2 – 1.4 m	0.1 – 1.0 m	4 – 13			
3	500 – 2000 kW/m	1.4 – 2.6 m	1.0 – 1.9 m	14 – 23			
4	2000 – 4000 kW/m	2.6 – 3.5 m	1.9 – 2.5 m	24 – 28			
5	4000 – 10000 kW/m	3.5 – 4.5 m	2.5 – 3.0 m	29 – 35			
6	>10000 kW/m	>4.5 m	>3.0 m	>35			