

# SS014 Fire Behaviour Forecast September 01

## Weather Synopsis

A second weaker cold frontal passage is expected to pass through the fire area starting around 2100 today resulting in gusty overnight winds again tonight, though this time blowing out of the SE. Cooler temps will dominate the area today, with max temp hitting 16C, the RH is expected to hit 28% during the burning day today though it will increase rapidly with the approach of the cold frontal passage tonight. Winds should calm from last nights cold front by 0900, they will remain E5-10 throughout the burning day, picking up by 1900 as the front approaches.

Poor RH recovery is expected again tonight as winds will remain gusty throughout the night. Max RH will be 60-65% and overnight winds will be SE10-15G30-40. Overnight temp will be 6-7C throughout the majority of the cold frontal passage (2200-0800).

## Fire Behaviour General

Fire behaviour today will be fairly moderate, though good pockets of conifer fuels have the potential to crown, possibly even exhibit continuous crown fire behaviour. The winds will be fairly dynamic today, starting off gusty, then getting fairly calm and then picking up again in the evening, during those transition times fire behaviour will be more erratic.

**Safety concerns:** Cold frontal passages are one of the more dangerous weather systems we deal with in fire management due to how quickly conditions can change from calm to aggressive. Make sure good communications are maintained and alert others to any changes in conditions you notice.

## Fire Behaviour Specific

**Fort Prov Aug 31 indices (FFMC 90, DMC 43, DC 632) Sep 01 1300 Wx 16C, 45% RH, ELY 10**

| FFMC | DMC | DC  | ISI | BUI | FWI |
|------|-----|-----|-----|-----|-----|
| 89   | 45  | 637 | 7   | 76  | 20  |

**Crown Aug 31 indices (FFMC 90, DMC 56, DC 634) Sep 01 1300 Wx 16C, 45% RH, ELY 10**

| FFMC | DMC | DC  | ISI | BUI | FWI |
|------|-----|-----|-----|-----|-----|
| 89   | 58  | 639 | 7   | 94  | 23  |

**Fire Behaviour (Using Fort Prov indices)**

| Fuel Type | Head Fire Intensity (kW/m) | Intensity Class | Fire Type          | Rate of Spread (m/min) |
|-----------|----------------------------|-----------------|--------------------|------------------------|
| C-2       | 8400                       | 5               | Intermittent Crown | 8                      |
| C-3       | 1300                       | 3               | Surface            | 2                      |
| C-4       | 7800                       | 5               | Intermittent Crown | 8                      |
| M-2 50    | 2600                       | 4               | Surface            | 4                      |

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