

SS014 Fire Behaviour Forecast September 03

Weather Synopsis

Another cold front will be passing through the fire area today. Arriving around 0600 it will cause the winds to shift to Northerly as well as becoming stronger and gustier. Through the majority of the burning day the winds will be NNW20G45-50 and will remain strong and gusty until late in the evening, beginning to calm around 2200 reaching NW5-10G15 by midnight.

This will again be a dry cold frontal passage with no expectation of accompanying precipitation. RH values will be relatively high reaching the forecast minimum of 45% around 1800, though depending on smoke conditions, there is potential for the RH to dip as low as 35%. Maximum temperature will be 18.

Fire Behaviour General

CAUTION Fire behaviour is expected to be much more aggressive today, with all fuel types roughly doubling the potential intensity and rates of spread as have been observed the last 2 days. Though both the temp and RH values are moderate the strong sustained and very gusty winds will drive fire behaviour and will likely reawaken portions of the fire perimeter that have been quiet.

Safety concerns: *Dry cold frontal passages are one of the most dangerous scenarios in wildfire management* Fire behaviour of this magnitude can far outpace suppression tools making direct attack ineffective. Ensure values protection gear is turned on early as fire could become active early as the cold front arrives around 0600.

Fire Behaviour Specific

Fort Prov Sep 02 indices (FFMC 89, DMC 46, DC 641) Sep 03 1300 Wx 16C, 60% RH, NNW20G50

| FFMC | DMC | DC | ISI | BUI | FWI |
|------|-----|-----|-----|-----|-----|
| 87 | 47 | 646 | 13 | 80 | 33 |

Crown Sep 02 indices (FFMC 90, DMC 60, DC 644) Sep 03 1300 Wx 16C, 60% RH, NNW20G50

| FFMC | DMC | DC | ISI | BUI | FWI |
|------|-----|-----|-----|-----|-----|
| 87 | 61 | 649 | 13 | 99 | 37 |

Fire Behaviour (Using Crown indices)

| Fuel Type | Head Fire Intensity (kW/m) | Intensity Class | Fire Type | Rate of Spread (m/min) |
|-----------|----------------------------|-----------------|--------------------|------------------------|
| C-2 | 26000 | 6 | Crown | 21 |
| C-3 | 11000 | 6 | Intermittent Crown | 10 |
| C-4 | 26000 | 6 | Crown | 21 |
| M-2 50 | 8500 | 5 | Intermittent Crown | 11 |

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