# **Fire Weather Index**

Legend

Hazard Rating	<b>FFMC</b> Fine Fuel Moisture Code	<b>DMC</b> Duff Moisture Code	<b>DC</b> Drought Code	<b>ISI</b> Initial Spread Index	<b>BUI</b> Build Up Index	<b>FWI</b> Fire Weather Index	<b>HFI</b> Head Fire Intensity
Low	0-76	0-21	0-79	0-1.5	0-24	0-4.5	1-2
Moderate	77-84	22-27	80-189	2-4	25-40	4.5-10.5	3
High	85-88	28-40	190-299	5-8	41-60	10.5-18.5	4
Very High	89-91	41-60	300-424	9-15	61-89	18.5-29.5	5
Extreme	92+	61+	425+	16+	90+	29.5+	6

These codes and indices are indicators of the dryness of the forest fuels and give relative measure of the burning conditions that can be expected for a "standard" fuel type. Low numbers mean wet and high numbers mean dry. The individual fields are:

## Fine Fuel Moisture Code (FFMC) Range: 0 - 101

Indicates the dryness of small forest vegetation, such as surface litter, leaves, needles, and small twigs. Derived from yesterday's FFMC and the local noon dry bulb temperature, relative humidity, wind speed, and 24-hour precipitation.

### Duff Moisture Code (DMC) Range: 0 - Unlimited

Indicates the dryness of medium-sized vegetation and loosely compacted organic layers of moderate depth (approximately 2 to 10 cm). Derived from yesterday's DMC and the local noon dry bulb temperature, relative humidity and 24-hour precipitation.

### Drought Code (DC) Range: 0 - Unlimited

Indicates the dryness of large vegetation, such as trees, and deep, compact organic layers (approximately 10+ cm). Derived from yesterday's DC and the local noon dry bulb temperature and 24-hour precipitation.

### Initial Spread Index (ISI) Range: 0 - Unlimited

Is a numeric rating of the expected rate of fire spread. It is based on wind speed and FFMC. Like the rest of the FWI system components, ISI does not take fuel type into account.

### Build Up Index (BUI) Range: 0 - Unlimited

A relative measure of the amount of fuel available for combustion. Derived from the DC and DMC.

### Fire Weather Index (FWI) Range: 0 - Unlimited

A relative measure of potential fire intensity, or energy available to be released. The FWI is a good indicator of overall fire danger. Derived from the BUI and ISI.

### Head Fire Intensity (HFI) Range: 1 - 6

Head fire intensity is the predicted intensity, or energy output, of the fire at the front or head of the fire.

Alberta