

Agriculture and Forestry Forestry Division

**Fort McMurray Forest Area
2017 Wildfire Season**

2016 Wildfire Season

	Provincial	Fort McMurray	% Of Total
#of Fires	1369	122	8.9 %
Area Burned	741,550.84 ha	601,713.89ha	81%

Provincial

- 829 – Human Caused Fires
- 521 – Lightning
- 19 – Under Investigation

Fort McMurray Forest Area

- 26 – Human Caused Fires
- 95 – Lightning
- 1 – Under Investigation

Winter Weather Conditions

- Persistent Upper Ridge has influenced much of Alberta this winter
- Precipitation received in Fort McMurray for the period of Nov to Feb was 53% of the average
- Fort Smith has received 147% of its average for the same time period
- Pacific Ocean surface sea temperatures along the equator are in the near normal range
- There is a slight possibility of entering into an El-Nino condition for the fall of 2017

Precipitation Totals MM

Precipitation Totals (November '16 – February '17)

<i>Station</i>	<i>Actual(mm)</i>	<i>Average(mm)</i>	<i>% of Average</i>
<i>Rocky Lane</i>	47.1	86.3	54.6%
<i>Peace River</i>	39.6	79.7	49.7%
<i>Grande Prairie</i>	66.1	101.8	64.9%
<i>Whitecourt Tower</i>	71.9	88.8	81.0%
<i>Fort Smith</i>	110.2	74.5	147.9%
<i>Fort McMurray</i>	40.2	75.8	53.0%
<i>Cold Lake</i>	33.6	70.3	47.8%
<i>Wabasca</i>	26.3	82.3	32.0%
<i>Edson</i>	64.1	86.0	74.5%
<i>Clearwater</i>	81.2	82.6	98.3%
<i>Elbow Ranger Station</i>	81.5	97.5	83.6%
<i>Source: Environment Canada/ AB Agriculture & Forestry</i>			

Table 1.

2017 Fire Season

It is extremely difficult to predict how a fire season will unfold. The following needs to be considered:

- Fall 2016 saw above normal precipitation amounts meaning fuel moisture was higher than previous years
- Winter 2016 was generally colder than winter 2015 but the amount of snowfall as of March 1 is 53% of the normal
- Generally the nature of snow melt and spring rains determine the character of spring wildfires. A slow snow melt along with periodic spring rains will mean more moisture in soil and vegetation

2017 Fire Season

Fire Season Considerations:

- Weather patterns during the period leading up to spring and the flush of new vegetation will determine the characteristics of spring fire behaviour. Drier conditions will mean more active fire behaviour
- Drought code forecasts provide a relative state of moisture levels in the deeper surface fuels and large forest fuels
- This provides fire managers an indication on the difficulty to extinguish wildfire.

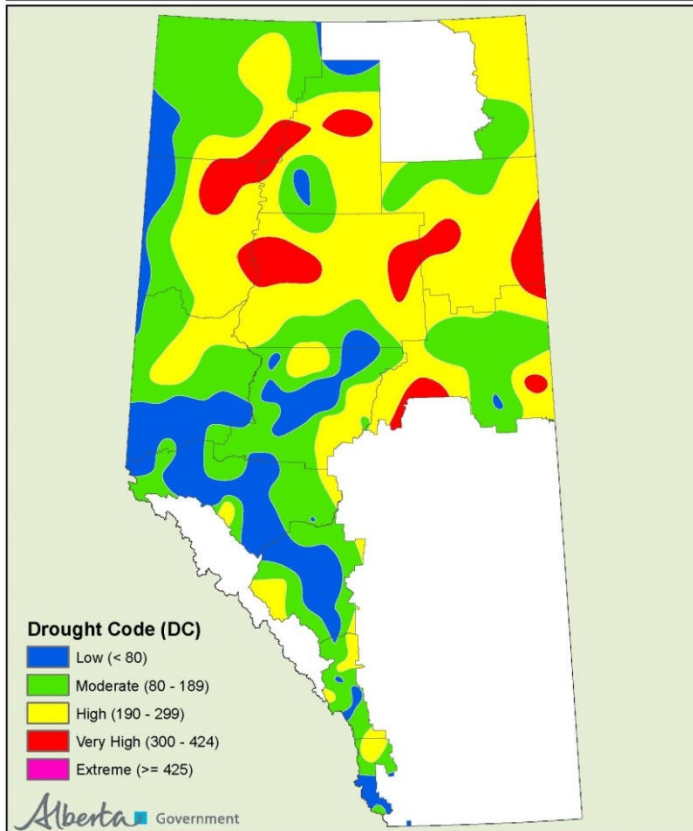
2017 Fire Season

The complexity and arrangement of Forest Fuels has changed around Fort McMurray:

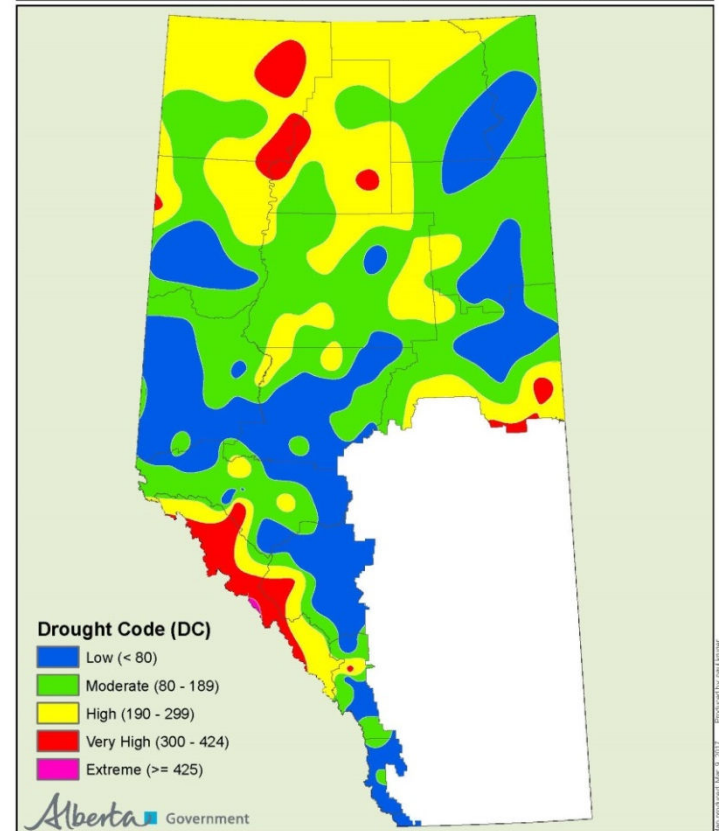
- Coniferous trees which are more susceptible to wildfire and burn with a greater intensity have been consumed by the Horse River fire
- The fire also consumed the fine and coarse woody debris on the forest floor
- The greater risk now is the cured grass fuels, especially in open areas. (pipelines, utility corridors, cut blocks and burned stands)
- Caution must be taken this spring will recreation activities occur on the land base

Drought Code Forecast for April 2017

Drought Code
April 1 2016

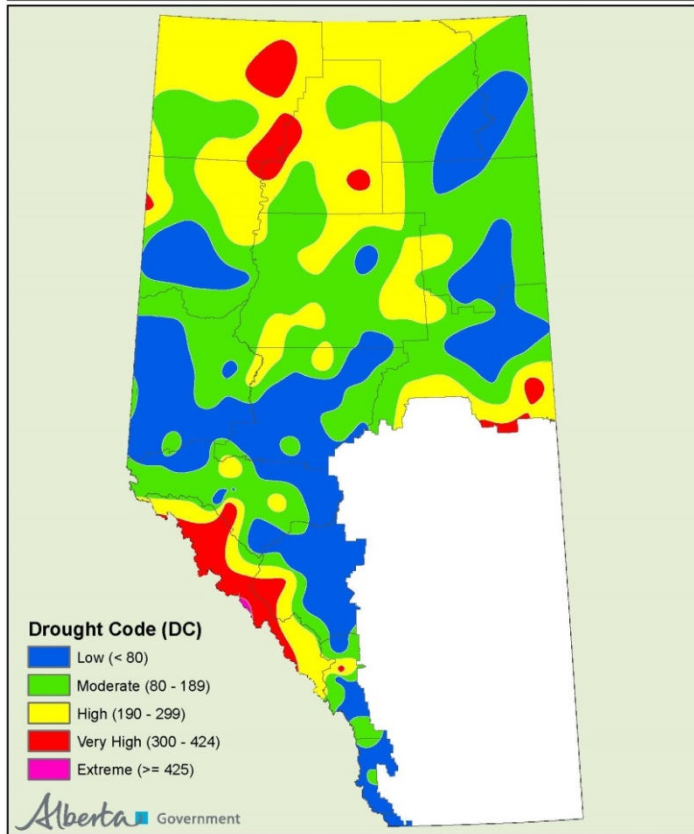


Starting Drought Code
April 1 2017
50% Average Precipitation (Mar)

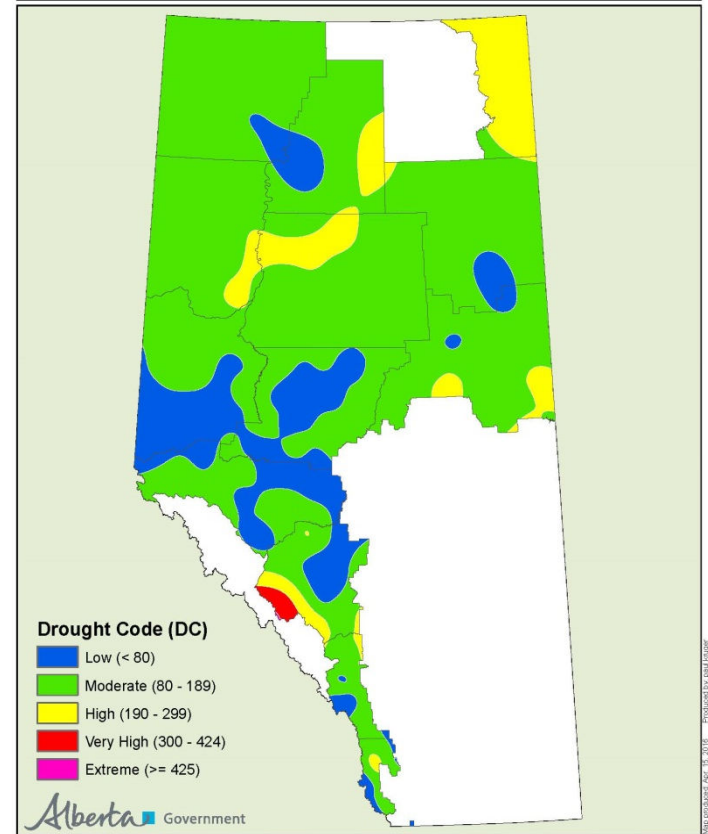


Drought Code Forecast for April 2017

Starting Drought Code
April 1 2017
50% Average Precipitation (Mar)



Average Drought Code (2005-2015)
April 1



Wildfire Management

- Sustainable Forest Management
- Wildfire Management Planning
- Landscape Management Planning - LARP
- Forest Health activities – monitoring and control
- Best available science, knowledge and technology

Fort McMurray Forest Area Preparedness

- 8 – 4 person Initial Attack Crews – initial attack
- 1 – 20 person Unit Crew – initial attack and sustained action
- 2 – 8 person Firetack Crews – sustained action

- Marten Firebase (50 person capacity)
- Grayling Firebase (50 person capacity)
- Fort Chipewyan Firebase (50 person capacity)
- Fort McMurray Air Tanker Base (2 loading pits)

- 13 Lookouts (May to September)
- 14 Permanent Automated Weather Station (PAWS)

Fort McMurray Forest Area Aircraft Availability

- 1 - Intermediate Bell 407

- **SEATS:** 6 + pilot
MAX INTERNAL LOAD (full fuel): 1050 lbs.
MAXIMUM EXTERNAL LOAD: 2650 lbs



- 1 – Medium Bell 212

- **SEATS:** 14 + pilot
MAX INTERNAL LOAD (full fuel): : 2750 lbs
MAXIMUM EXTERNAL LOAD: 3,450 lbs



Questions ?