

Moisture Situation Update – January 30, 2013

Synopsis:

Most areas of the province north of the Trans-Canada Highway have seen at least near normal snow pack accumulations to date, with parts of the central Peace Region seeing snowpack's this deep less than once in 6 to 12 years. Since the start of winter (November 1st) most of the province has seen relatively mild temperatures with the long deep cold spells, that typically define winter for so many of us, being generally absent.

Snow pack accumulations relative to long term normal as of January 27, 2013 (see map)

- For the most part, north of the Trans-Canada Highway, snowpacks are at least near normal.
- Across much of the central parts of the Peace Region, snowpacks are well above normal, with large areas seeing snowpacks this deep on average less than once in 6 to 12 years.
- Across the Swan Hills and throughout parts of the Clear Hills, snow packs are estimated to be near 1 in 50 year highs, and in places are upwards 1.5 meters deep (4-5 feet).

90-day average daily mean temperatures relative to long term normal as of January 27, 2013 (see map)

- Most of the province has enjoyed a milder than average winter, notably absent of prolonged cold snaps that are all too typical of winters across most of Alberta.
- Generally the west-half of the province has seen the warmest temperatures, relative to normal, with many areas seeing mild conditions like this on average less than once in 6 to 12 years.
- Over the past few months, temperatures have been extremely variable over very relatively short periods of time, as the battle between cold arctic air and warmer air masses rages. This is not unusual and temperatures swings of 35°C over the course of a few days are not uncommon in Alberta's meteorological record.

Interesting Facts:

Days (daylight hours), of course are getting longer; but, did you know that for Central Alberta, daylight increases at the greatest rate (3½-4 minutes a day or about 30 minutes a week) starting in February, all the way through to the first week of May? In comparison, on January 7th, daily increases in daylight are only in the order of about 2 minutes per day (14 minutes per week). By June 1st, daylight increases are back down to about 2 minutes per day (14 minutes per week) and by the summer solstice on July 22nd, reach 0. This, of course, marks the point when daylight hours slowly start to decrease in the inexorable march towards winter.

Additional Maps can be found at www.agriculture.alberta.ca/maps

Near-real-time hourly station data can be viewed/downloaded at www.agriculture.alberta.ca/stations Note: Data has about a two hour lag and is displayed in MST (add one hour for daylight savings time)

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Snow Pack Accumulations In Stubble Fields Relative to Long Term Normal

Estimated as of January 27, 2013

Condition	Frequency
driest	< once in 50-years
extremely low	once in 25 to 50 years
very low	once in 12 to 25 years
low	once in 6 to 12 years
moderately low	once in 3 to 6 years
near normal	once in 3 years
moderately high	once in 3 to 6 years
high	once in 6 to 12 years
very high	once in 12 to 25 years
extremely high	once in 25 to 50 years
wettest	< once in 50-years
no data	

Near-real-time weather data was assembled and quality controlled by Alberta Agriculture and Rural Development. The snow pack was modeled for stubble fields using the Modified Versatile Soil Moisture Budget V.2.0. The frequency of occurrence was based on model runs using historical weather data from the 1961-2010 period, interpolated to township centres using AbClima-3.1.



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