### Synopsis:

February and March were colder and drier than normal. This is in contrast to the first few months of winter (November to January) that saw cooler than normal temperatures, accompanied by well above normal precipitation. This winter should serve as reminder that across Alberta medium term weather patterns can and do often change dramatically.

On average, province wide April is still a relatively dry month. The start of normally wetter, spring like conditions first arrives during the second half of April across the southwest portions of the province, spreading northward to the rest of the province, by the last half of May.

## Precipitation accumulations April 1 to April 13, 2014 –see map

- Moderate amounts of precipitation have fallen over most parts of the province, with the
  greatest accumulations recorded high in the mountains, west of Calgary, with totals here in
  the 35 to 40 mm range.
- Parts of Southern Alberta have received upwards of 15 mm.
- The dry central parts of the province have remained without any appreciable precipitation.

## 60-day average temperatures, relative to long term normal for February and March -see map

- February and March were extremely cold, with most of the province seeing temperatures this cold, on average less than once in six-years.
- Much of the central portions of the province were even colder, seeing sustained temperatures this cold on average less than once in 50-years.

#### Estimated snow pack water equivalent, as of March 31th, 2014 -see map

- Snow packs peaked near the end of March, with unusually deep snow packs extending over a large area west of Highway 2 between Sundre and the western Peace Country.
- Many of these areas are estimated to have upwards of 200 mm of water stored in the snowpack. This is a tremendous amount of water and the cool weather of late has been good in the sense that snow melt has been prolonged giving the melt water time to drain off the landscape and soak into the soil.

#### Seasonal precipitation patterns –see map

- In April, in the southwest portions of the province, average precipitation is about 55 mm, rising to about 85 mm in May. In contrast across the North Peace Region, April averages are about 15 mm, only rising to about 35 mm for the month of May. By June, both areas receive on average about 80 to 100 mm.
- Peak average monthly precipitation accumulations are on the order of 100 to 120 mm, which
  occur in June and July, through a large portion of north-western Alberta, lying between Slave
  Lake and Sundre.
- By July, southern Alberta has dried significantly with average monthly accumulations in the 30-40 mm range, whereas most areas north of the TransCanada Highway are above 70 mm.

#### Perspective:

For those areas that are currently dry, remember that the wet season is still ahead of us, typically starting in mid-May, lasting through to the end of July. This is a critical period for crop growth and there is truth to the notion that, no one ever lost a crop before it was planted. Another interesting saying is "Seed into dust and the bins will bust".

# Moisture Situation Update - April 13, 2014

Additional maps can be found at <a href="https://www.agriculture.alberta.ca/maps">www.agriculture.alberta.ca/maps</a>

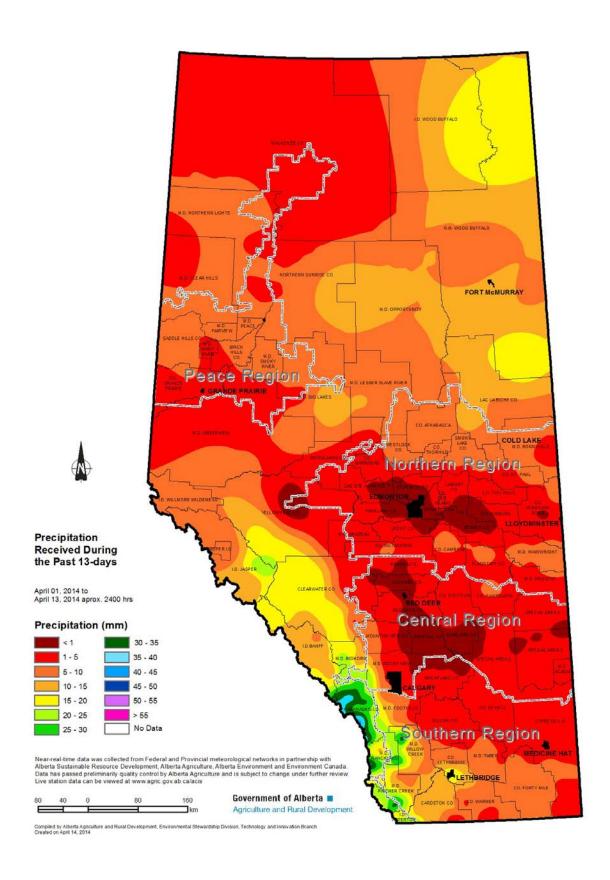
**Near-real-time hourly station** data can be viewed/downloaded at <a href="https://www.agriculture.alberta.ca/stations">www.agriculture.alberta.ca/stations</a>

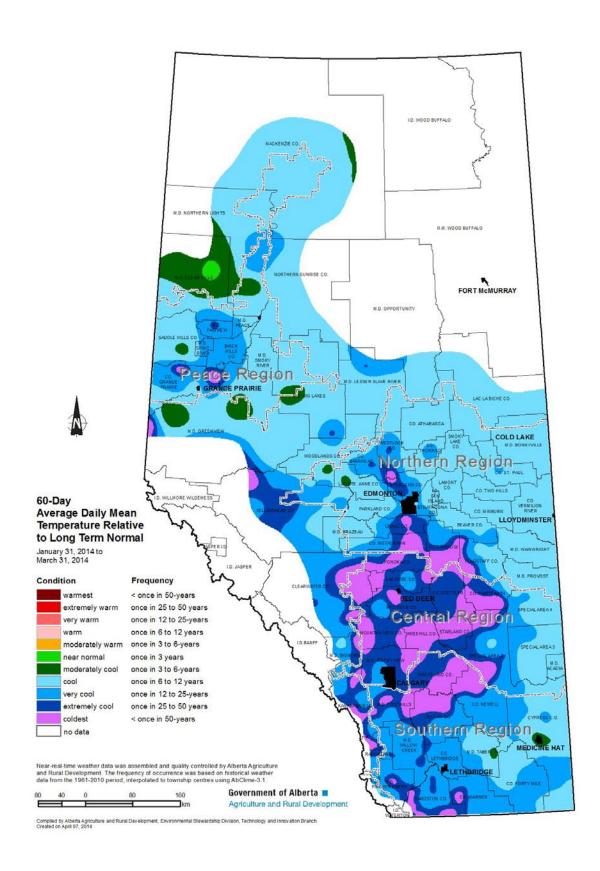
Note: Data has about a two hour lag and is displayed in MST (add one hour for daylight savings time)

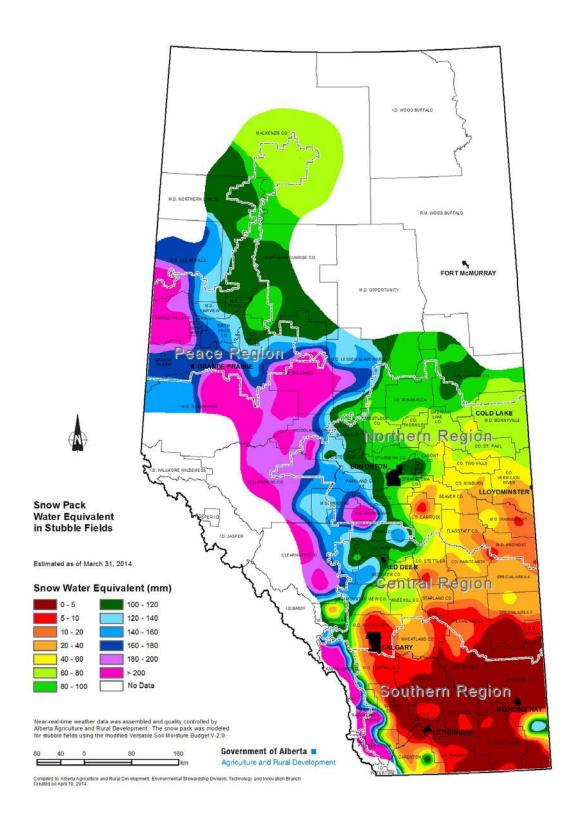
Ralph Wright, M. Sc.

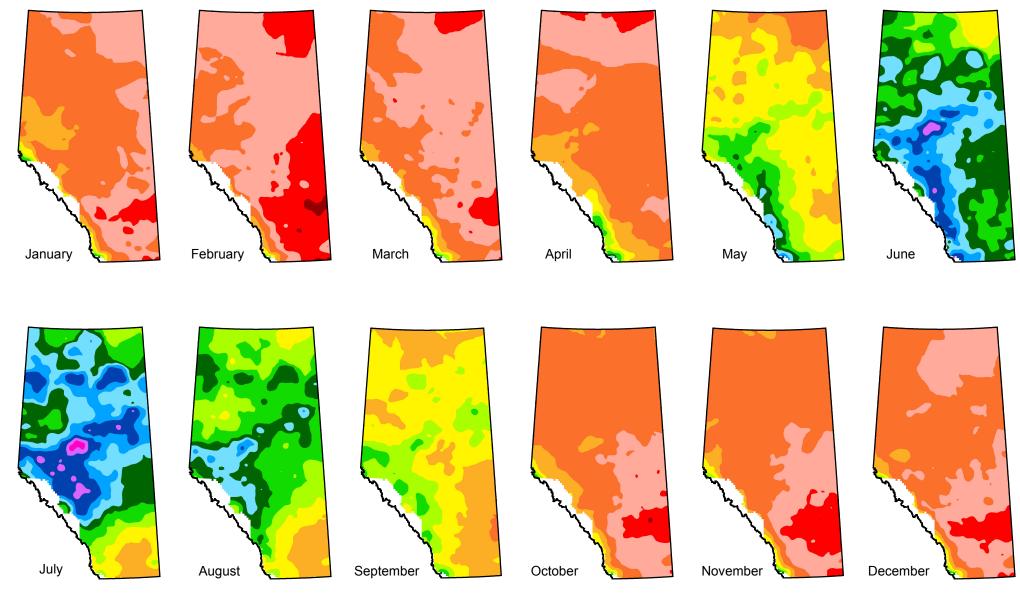
Manager: Agro-meteorological Applications and Modelling Section

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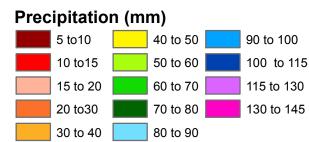


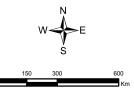


# **Average Monthly Precipitation in Alberta**

for the period 1961-2010

Average based on historical weather data from the 1961-2010 period, interpolated to township centers using AbClim-3.1.





Government of Alberta ■
Agriculture and Rural Development