Moisture Situation Update - December 2, 2014

Synopsis

Last week a major winter storm brought snowfall to most areas of the province. Those areas that got hit the hardest lie in a wide swath west of Highway 2, stretching from the US border up as far north as the town of Peace River. Here, most locations received at least 20 cm of new snow, with some areas seeing upwards of 60 cm of new snow. In the wake of this system, many areas north of Red Deer saw temperatures dip to well below -35°C over the weekend.

For this time of year, snowpack development is off to a good start across most of the province, with snow packs as of December 2 estimated to be at least near normal across all areas, except the extreme northern Peace Region. In fact, parts of the province have snow packs in excess of one in 6-12 year highs, with a few pockets estimated to have snow packs, this deep on average less than once in 50 years. In some areas along the northern slopes of the Swan Hills, southeast of Grande Prairie and across the Saddle Hills, snow packs are estimated to be about one meter deep or more.

Recent snowfall accumulations November 25 to November 30- see map

- The massive snowstorm late last week affected a wide swath of Alberta, with the greatest accumulations generally falling north of Red Deer, along the foothills and throughout the mountains. Most of these areas saw at least 20 cm of new snow, with some mountain areas estimated to have received well over a meter of fresh snow.
- Along a wide swath of the Yellowhead Highway, from around Elk Island to Entwistle, many areas saw 30 cm or more of new snow. West of this towards Edson, upwards of 60 cm fell in some isolated areas.

Snowpack accumulations relative to long term normal as of December 2, 2014– see map

- Province-wide, most areas are estimated to have at least near normal snow packs to date.
- The northern Peace Region is the only area with snow packs that are below normal, with snow packs estimated to be at one in 3-6 year lows.
- In contrast, some parts of the Peace Country have snow packs approaching one in 50-year highs, a result of three major storm events, one in late October a second in early November and this last one which occurred during the last week of November.
- Of note is heavy snow accumulation north of Brooks and through eastern parts of Special Area 4. This is as a result of snows in late October, early November and the latter part of November.

Interesting facts

- In the wake of this last storm, the Kakwa Auto station (approximately 100 km south of Grande Prairie) reported -45.5°C during the early hours of Saturday morning (November 29).
- Between November 28 and November 30, 58 stations in the province recorded temperatures that fell below -35°C.
- On November 28th, in the mountains southwest of Calgary, two stations (Little Elbow Summit and Three Isle Lake) received up to a meter of fresh snow in that single day.
- The days get longer on December 22, but did you know that several days before December 22, sunset occurs a little later each day, and it's not until near the very end of December that sunrise starts arriving earlier.
- By February 1, 2015, central Alberta will see daylight increasing by almost four minutes per day!

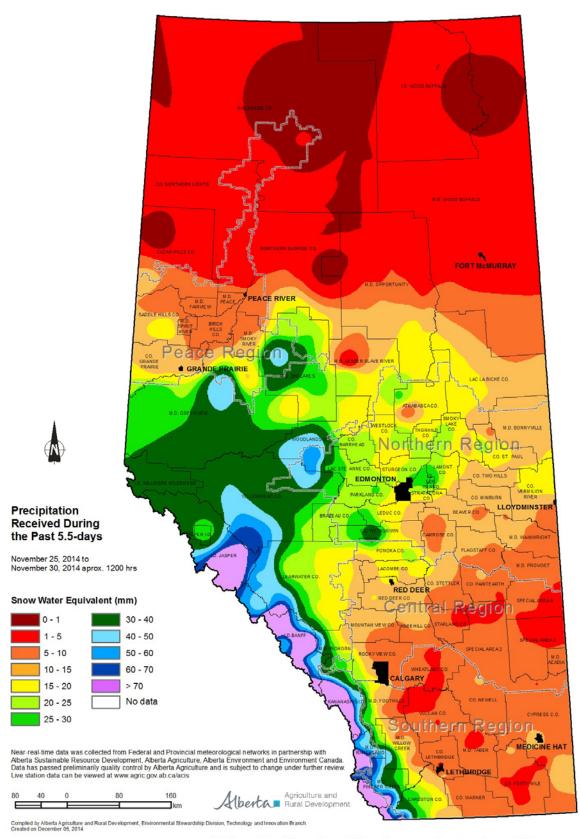
Additional maps can be found at www.agriculture.alberta.ca/maps

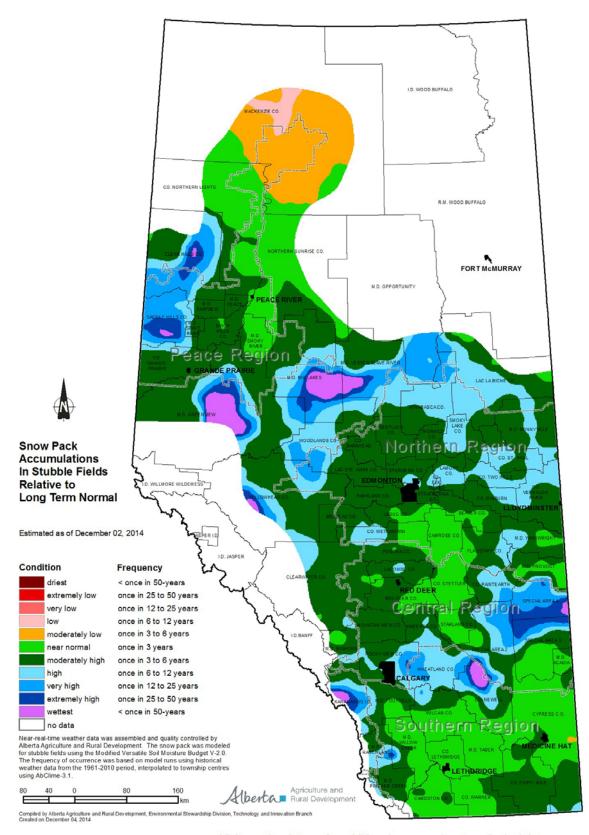
Near-real-time hourly station data can be viewed/downloaded at www.agriculture.alberta.ca/stations **Note:** Data has about a two hour lag and is displayed in MST (add one hour for daylight savings time)

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