Moisture Situation Update – March 16, 2014

Synopsis:

February was much colder than normal, with most of the province seeing the month of February this cold on average less than once in 6 to 12 years. Similarly the first week in March was extremely cold, finally giving way to a significant and sudden warming trend which arrived on about March 8th. Since that time, temperatures have been well above seasonal, with areas generally south of the TransCanada currently being snow free.

Heading into spring, snow packs are variable across the province, ranging from in excess of one in 25 to 50 year highs in pockets in through the Swan Hills and along the foothills between Calgary and in the western Peace Region, down to less than once in 6 to 12 year lows across parts of east central Alberta.

Largely due to a warm dry fall, soil moisture reserves under the snow pack are extremely low throughout most of central Alberta, with the greatest concern being the extremely low reserves in east central Alberta, underlying below average snow packs. However, this winter has proven once again that recent weather patterns are not a reliable predictor of what will happen in the coming weeks. Currently, those areas with low soil moisture reserves, coupled with below average snow packs, still have adequate time to receive moisture ahead of planting and germination.

60-day Precipitation Accumulations Relative to Long Term Normal as of March 16th, 2014 – see map

- November and December were much wetter than normal, particularly across a large area lying west of Highway 2, stretching well south of Calgary, up into the western Peace Region.
- This wet pattern abruptly ended about mid-January, and continues to this day, with the most of the province now experiencing much dryer than average conditions. In fact, large parts of the main agricultural areas see on average, 60-day accumulations this low less than once in 25 to 50 years. However in these areas, January and February are amongst the normally drier months of the year with generally less than 40 mm falling here on average.

Snow Pack Accumulations Relative to Long Term Normal as of March 16th, 2014 –see map

- For this time of year, snow packs are at least near normal across the majority of the province.
- Exceptions include a large area lying east of Highway 21 stretching from Cold Lake to just south-east of Red Deer, as well as around the City of Calgary, and through the south-eastern portions of the Special Areas.

Soil Moisture Reserves Relative to Long Term as of March 16th, 2014 –see map

- Soil moisture reserves south of the TransCanada Highway are least near normal for this time of year, with some areas in the extreme southeastern portions of the province estimated to have reserves this high, only once in every six to 12 years.
- Generally north of Highway 16, soil moisture reserves are well below normal, with a large area, lying east of Red Deer and Edmonton, estimated to have reserves this low on average less than once in 25 to 50 years.

Interesting Facts for the Month of March

- March came in “like a lion” with 50 stations recording lows of -40°C or colder between March 1st and 2nd
- The coldest recorded temperature was -45.7°C at Kakwa Auto north of Grande Cache on March 2nd
- The warmest temperatures occurred March 12th, with 16 stations recording highs of 15°C or more, with the Pine Coulee Reservoir station, near Pincher Creek reaching 18.7°C.
- Since March 1st, the Akamina station, near the continental divide in Watertown Lakes National Park recorded over 200 mm of precipitation, which is nearly 2 meters of fresh snow.

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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)

Ralph Wright, M. Sc.
Manager: Agro-meteorological Applications and Modelling Section
Work: 780-427-3556
Cell: 780-446-6831

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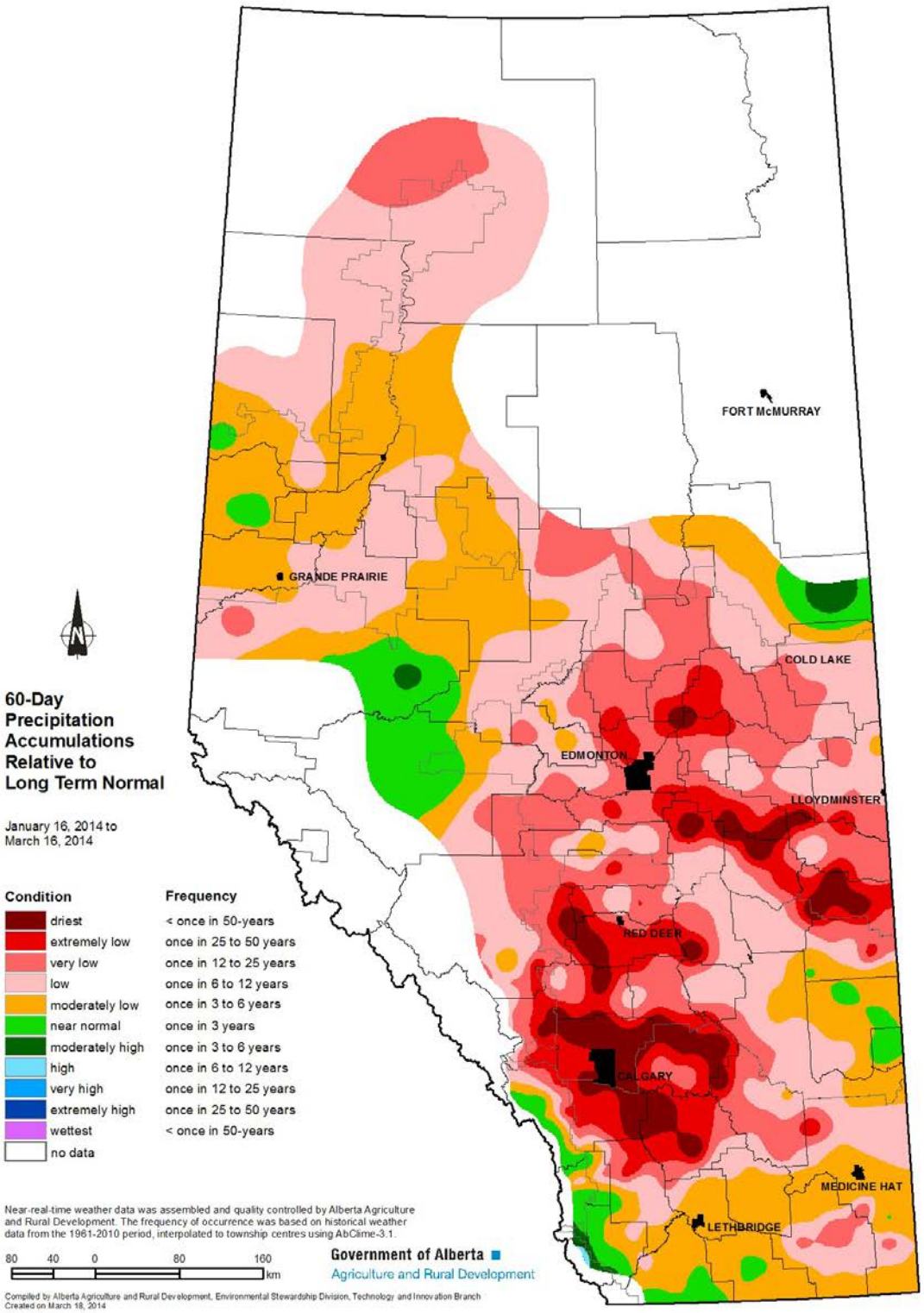

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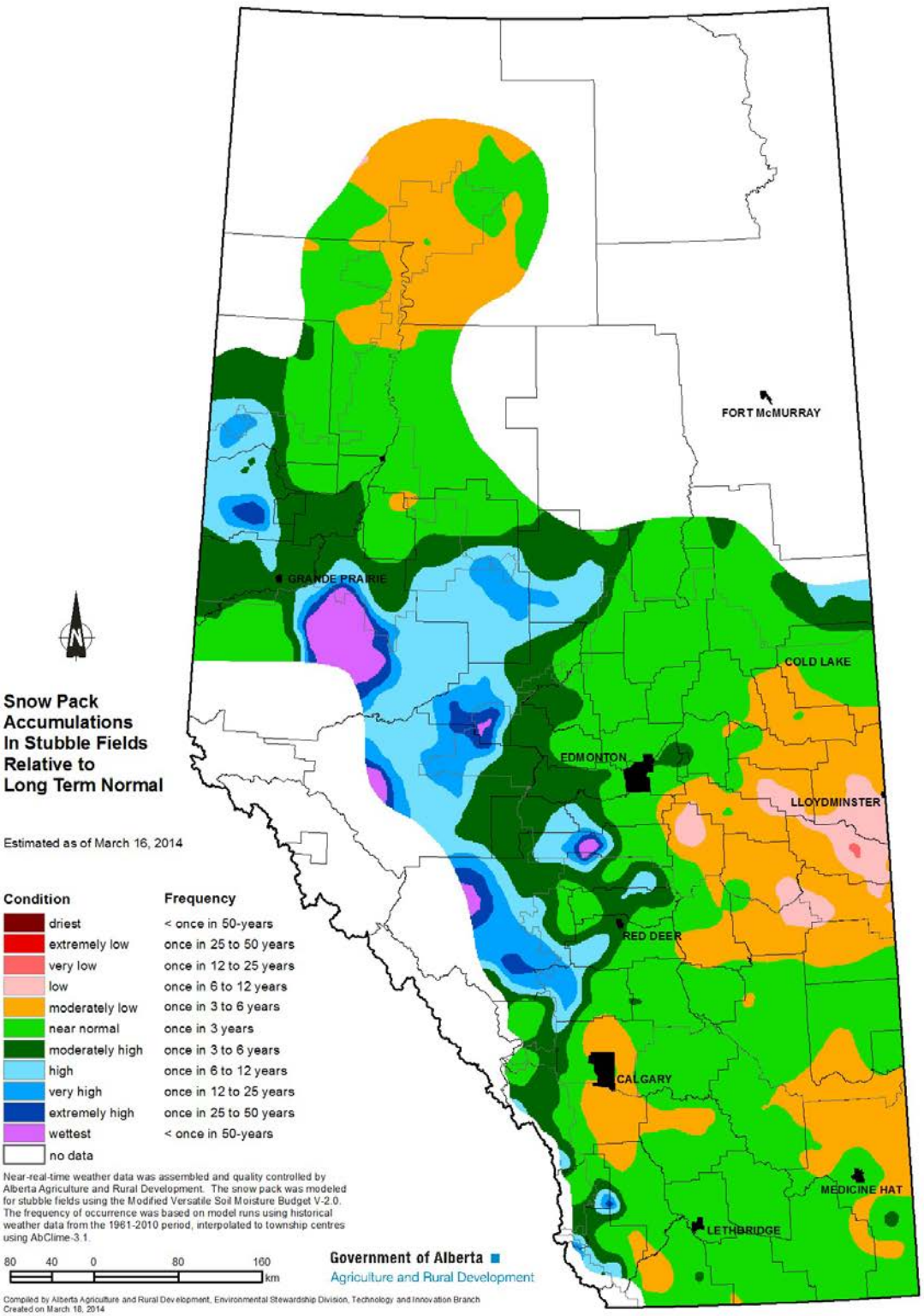

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