

Moisture Situation Update – October 2, 2018

Synopsis:

This September has been exceptionally cold, and for many lands west of Highway 2, unusually wet. Currently, our weather is stuck in a stable blocking pattern, which is drawing cold arctic air into Alberta. Unseasonably cool weather is expected to persist for at least the next week. Beyond that, some forecast models are showing a warming trend, while others are not. Suffice it to say, that weather forecasts beyond 5-days are not consistently accurate and it is not unusual to see abrupt shifts in weather patterns. Currently, the long range forecasts are mixed, with some pointing to a developing El Niño bringing a warmer than average winter and the Farmers' Almanac predicting a colder than average winter...take your pick.

For those that are thinking this is the worst September in memory that may be true, depending on how good your memory is and where you are in the province. For Edmonton, this September ranks as the third coldest, looking back as far as 1961, with 1965 being the coldest, followed only eight years later in 1972 by the second coldest September. It's been more than 50 years since Edmonton has seen a September this cold. In both 1965 and 1972 the weather in October warmed significantly with several days above 15°C recorded in both years, followed by winter snowpacks that were both above average.

Across the entire Province temperatures for this September ranged from less than one in six year lows across the south, to less than one in 50-year lows across most of the Peace Region (**map 1**). In the early morning hours of October 3rd, temperature's dipped well below -10°C in the Calgary area, following a significant snowfall event. Elsewhere on this same day, few areas in the province escaped a killing frost, with most dipping below -4°C for several hours.

Over the past few days a large snowfall event blanketed areas of the province between Ponoka and the US Border. This system was centered near Calgary (**map 2**), where upwards of 30 to 40 cm snow fell. Snowfall amounts generally increased westward, with some high mountain stations recording over 70 mm of precipitation which may be upwards of a meter of fresh snow given that the snow was very light and "fluffy", fueled by extremely cold air aloft.

Since the end of August a change in weather patterns has resulted in most areas of the province experiencing at least near normal precipitation accumulations (**map 3**). A large area lying south of Edmonton and north of Calgary has seen above average accumulations, with several pockets estimated to be this wet, on average less than one in six years. In contrast, a dry area is still persisting south of Fort Vermillion, just east of the Peace River near La Crete.

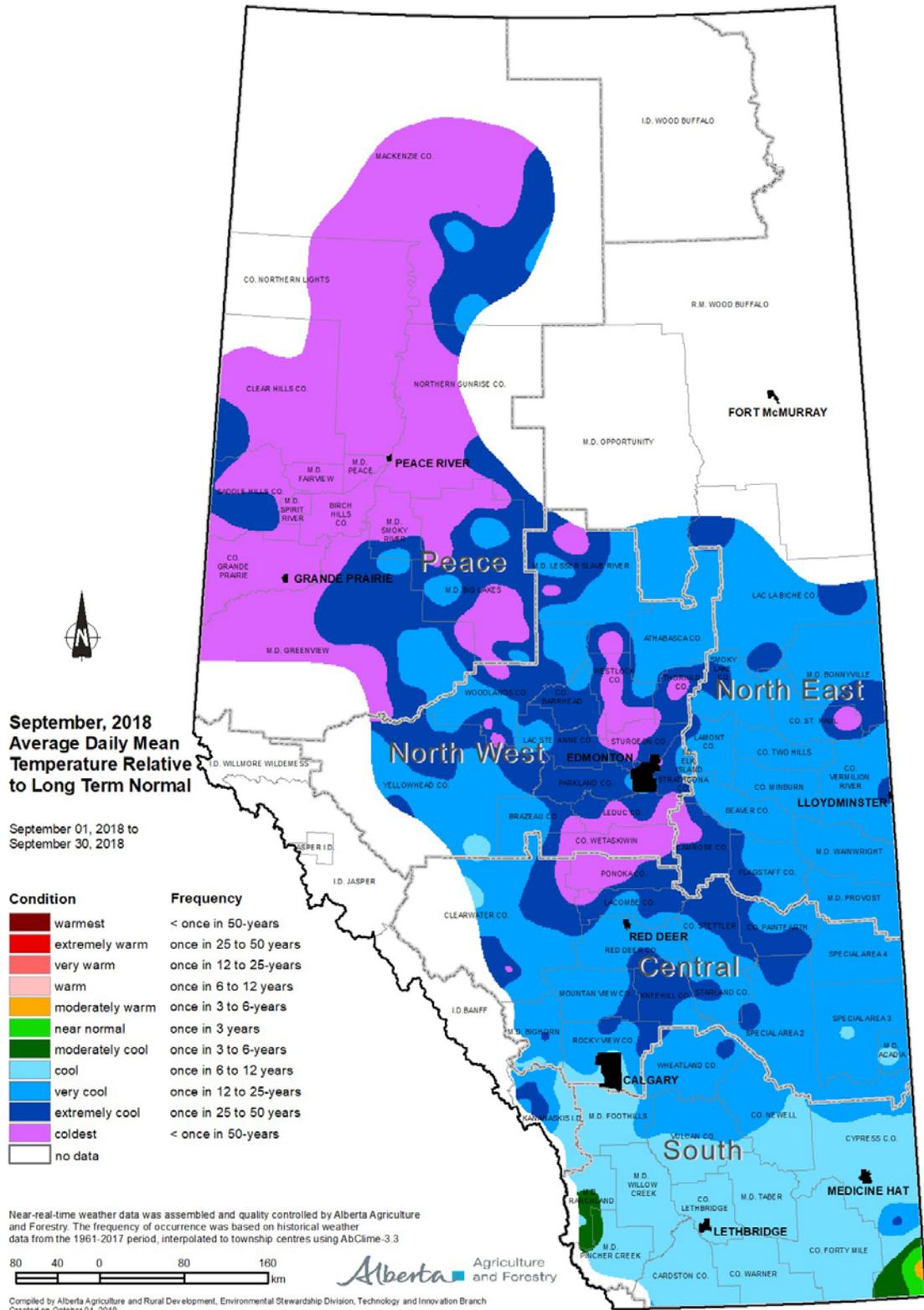
Near-real-time hourly station data can be viewed/downloaded at www.agriculture.alberta.ca/stations

Note: Data has about a two hour lag and is displayed in MST.

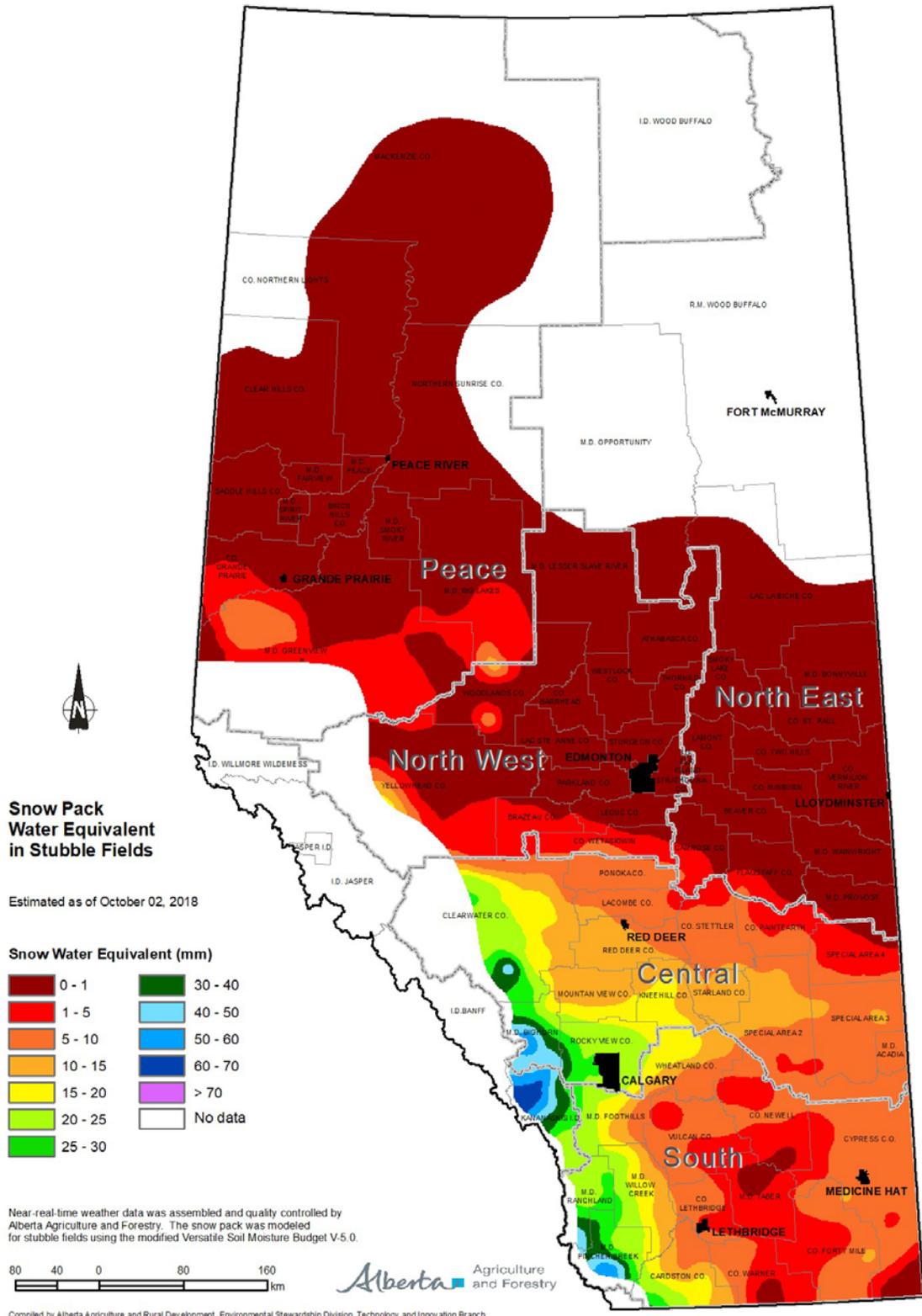
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Map 1

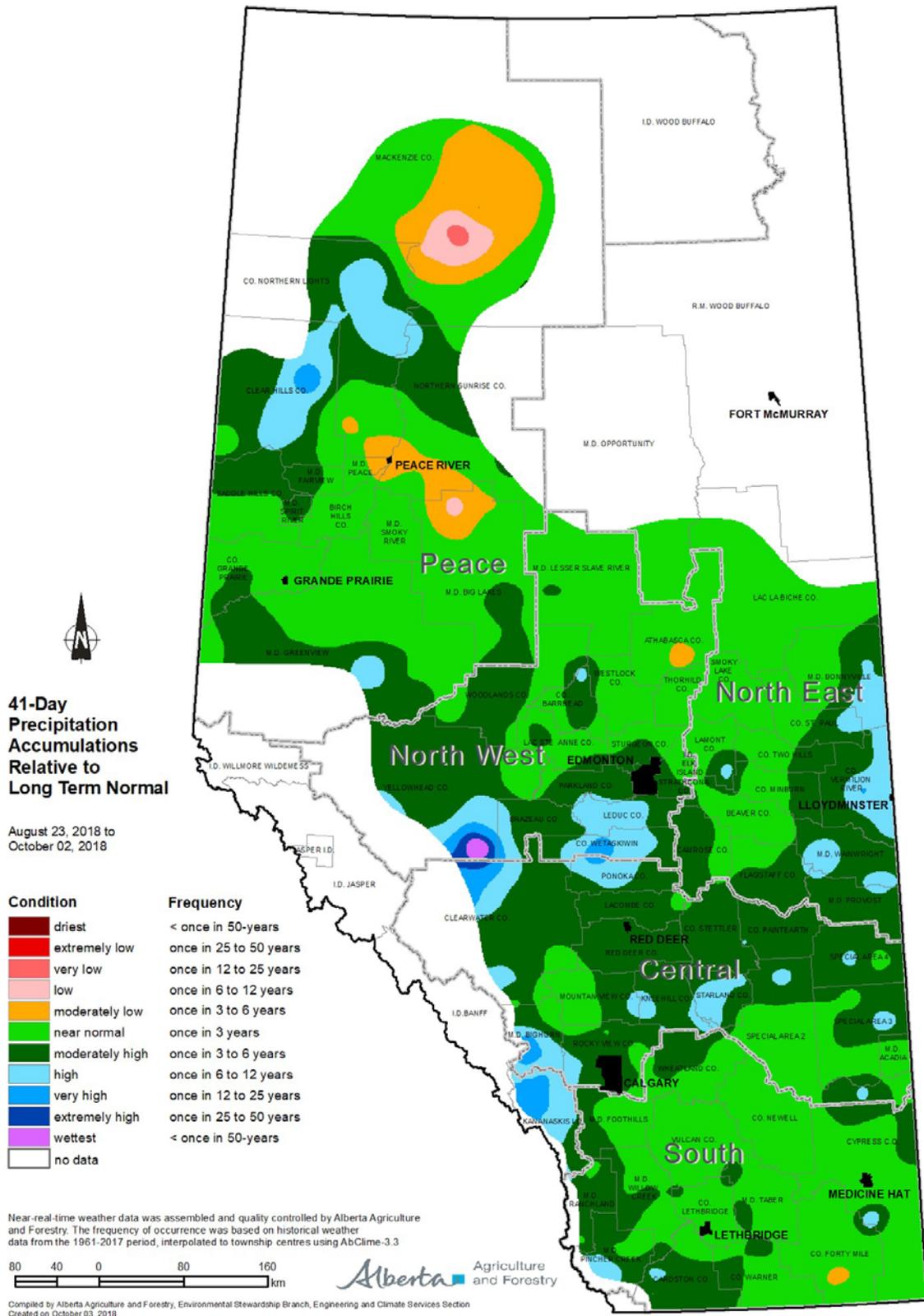


Visit weatherdata.ca for additional maps and meteorological data



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Map 3



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