

Moisture Situation Update – October 28, 2018

August 24, 2018 marked the start of a seven week long cold spell that affected most of Alberta, finally ending on October 15th. This was indeed a rare event estimated to occur, on average, less than once in 50-years (**map 1**). Thankfully, October 15th marked a reversal of this cold trend, with the arrival of warmer than average temperatures which persisted for the rest of the month (**map 2**). Fortunately, late October stayed dry, allowing many to make significant progress in their harvesting operations.

For many areas the cool September and early October weather was relatively wet allowing soil moisture reserves to rebound, aided by low evaporative demand brought on by cool weather and several frost and snow fall events that all but shut down active growth. As a result, current soil moisture reserves are at least near normal across most of the province (**map 3**). However, dry conditions persist across parts of southern Alberta, where some areas are experiencing one in three to six year lows (for soil moisture), and across the northern Peace Region where a small pocket of less than one in 50-year lows are present in the lands in and around La Crete.

While the short term moisture situation has improved for most, looking back over the past two years, there still are long term moisture deficits that exist across a wide area stretching from near Red Deer, all the way down to the US border (**map 4**). These deficits are greatest in and around Calgary (one in 50-year lows) and extend down a wide corridor that sweeps just north of Lethbridge and extends down into parts of the extreme south east corner of the province, where several areas are in the 25 to 50-year low range. In addition, most of the north half of the Peace Region has been overall drier than normal over the past two years, with some areas experiencing one in 12 to 25 year deficits. From a cropping perspective these longer term deficits may not affect crop production, provided that next year's rains are near normal and occur in a timely fashion.

Winter will soon be upon us and long range forecasts are mixed with some pointing to a possible El Niño year that is typically thought to be associated with a warmer and drier winter, but mother nature often does not hold to our "rules". Alberta is a geographically highly varied province and rarely is a single trend expressed across the entire province, over a period of several months. At this point it really is anybody's guess as to what the winter will bring and there is still ample time to make up moisture shortages ahead of next year's growing season.

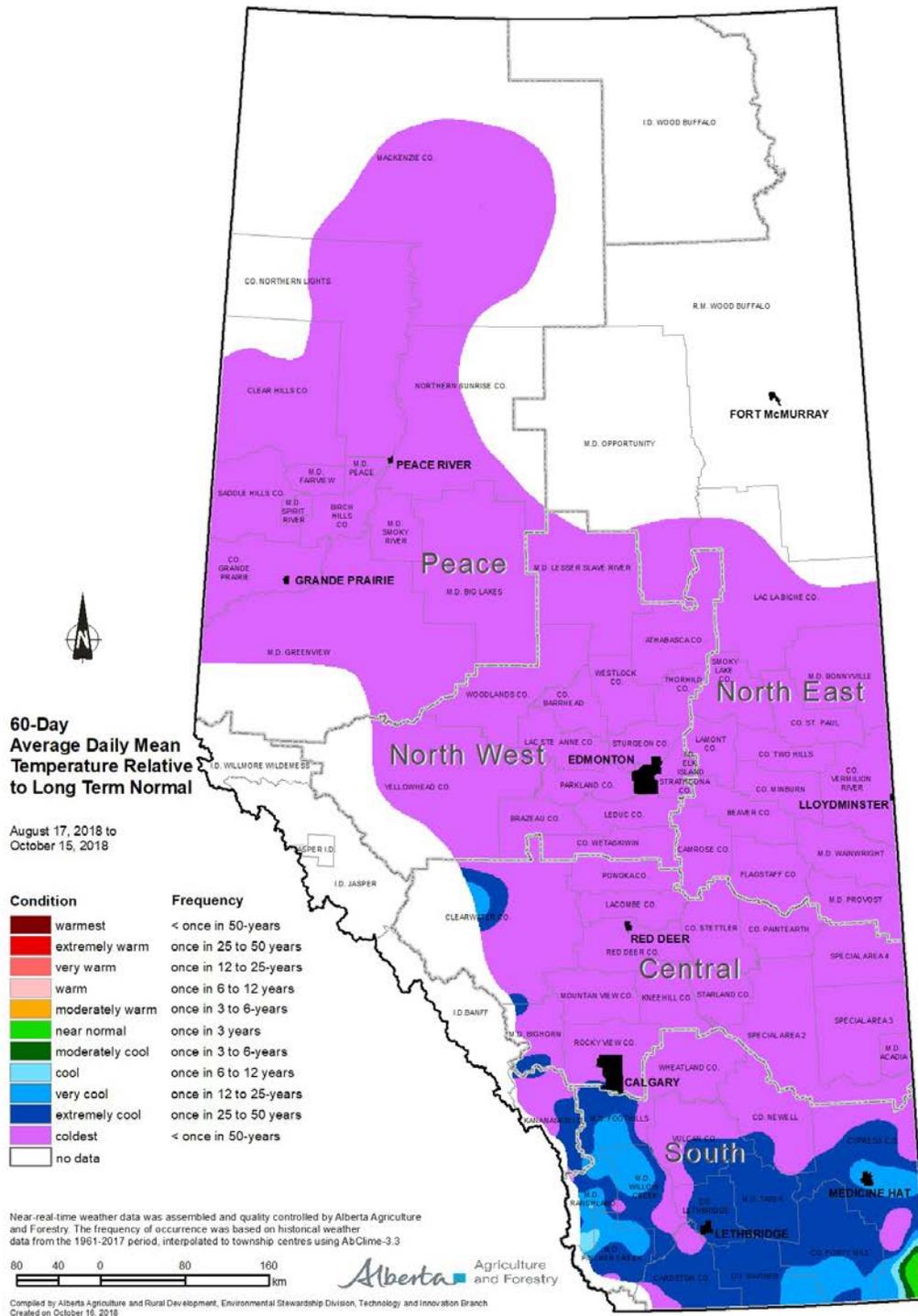
Near-real-time hourly station data can be viewed/downloaded at www.agriculture.alberta.ca/stations

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

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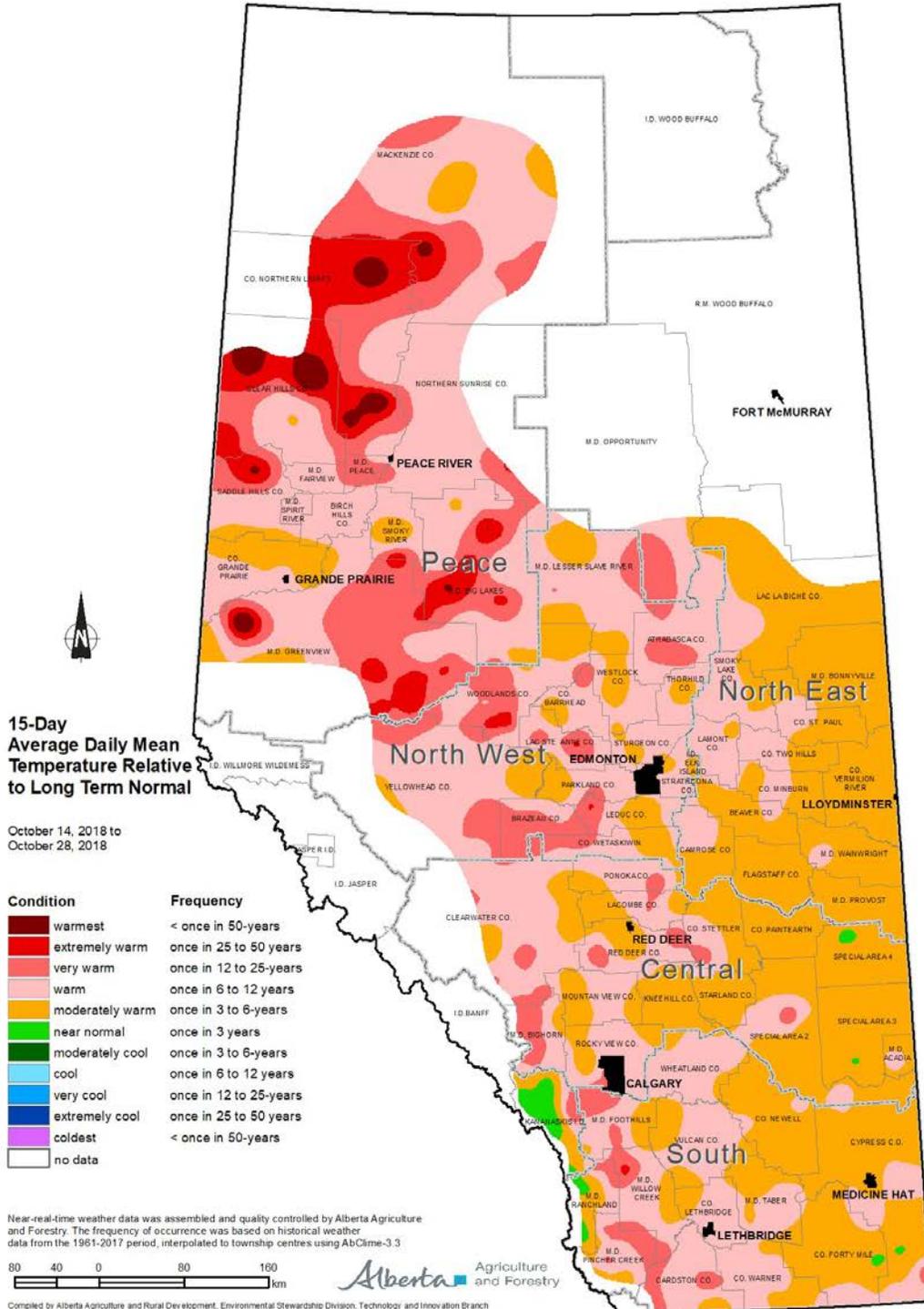
Map 1



Visit weatherdata.ca for additional maps and meteorological data

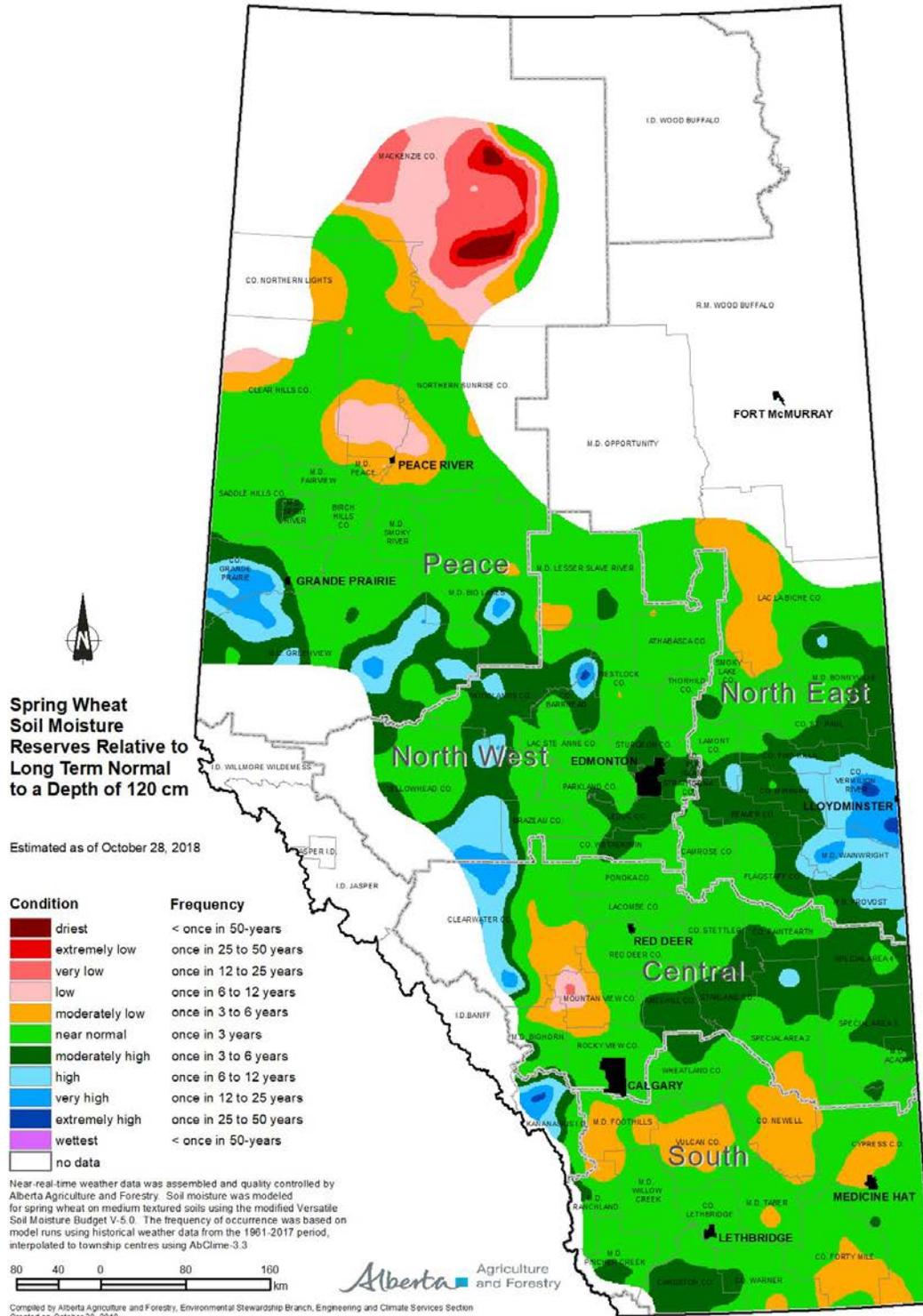
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Map 2



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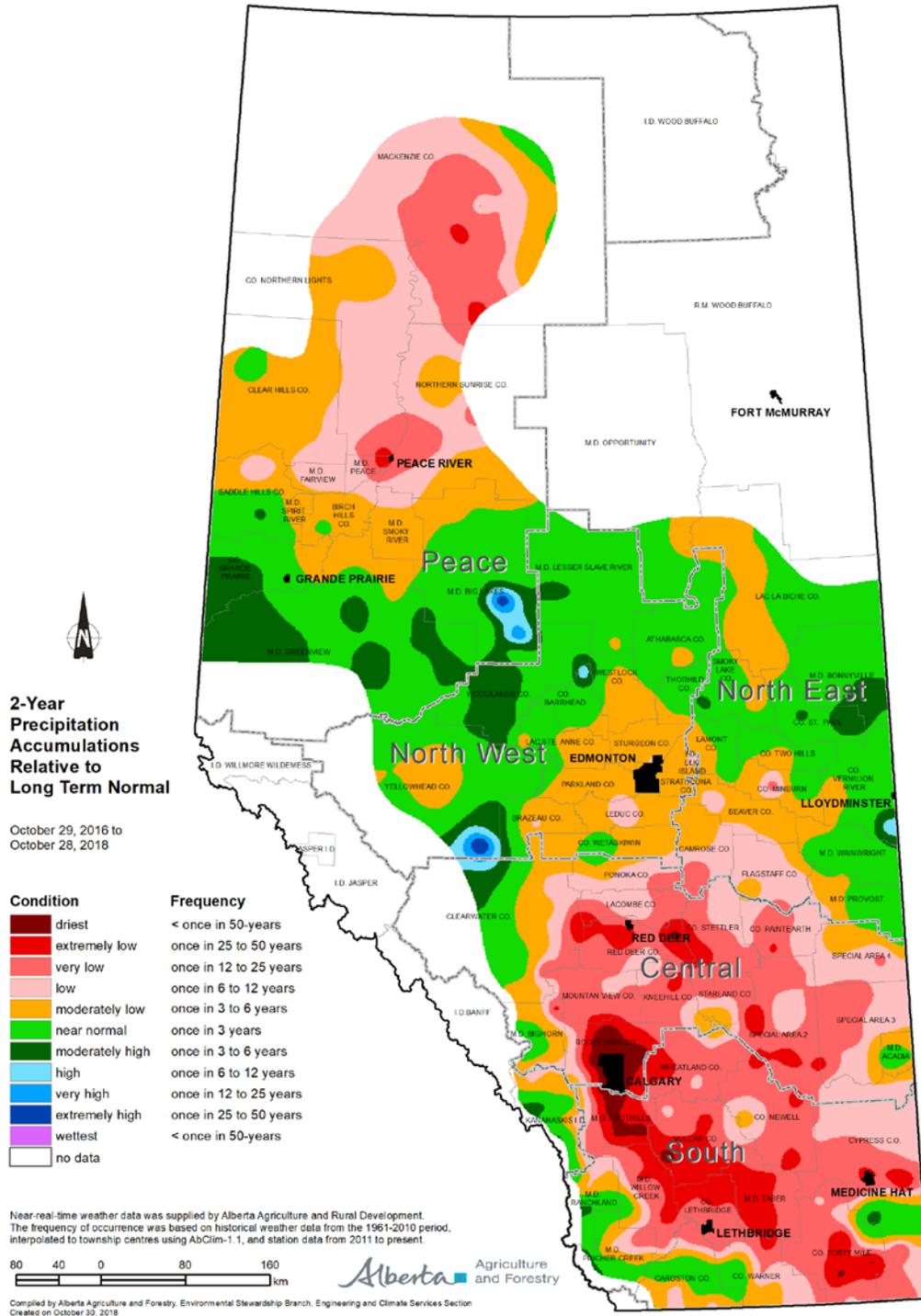
Map 3



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Map 4



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