Synopsis:

Over the past 30-days (as of July 10, 2017), most areas south of the Yellowhead Highway have experienced relatively dry conditions (**see map 1**), following several weeks of at least near normal rainfall accumulations. Since mid-June, many areas have received less than 30 mm of rainfall, including lands in and around Red Deer, Calgary, and across much of the central parts of the Southern Region (**see map 2**). In contrast, many locales north of the Yellowhead Highway, stretching up through to the southern edge of the Peace Region, continued to receive at least near normal moisture, with most areas within this zone receiving between 50 to 150 mm of moisture.

At the start of July, hot dry weather settled in across most of the province, with parts of the south seeing temperatures this warm, on average, less than once in 50-years (**see map 3**) with day time temperatures topping 30 °C for well over a week, straight. The hottest day occurred on July 7th, with highs exceeding 35°C across most lands, south of the TransCanada Highway.

Province wide, soil moisture reserves have decreased significantly, but remain highly variable (**see map 4**). Through most of the west-half of the province and through the northern Peace Region, reserves are estimated to be below normal, with some isolated pockets estimated to be at or near one in 12 to 25 year lows. In stark contrast, parts of the North East, centered on the M.D of Bonneville, are estimated to have at least one in 12 to 25 year highs.

Fortunately, over the past few days, many areas have experienced a reprieve from the hot weather of late, with some lands between Red Deer, Calgary and Medicine Hat, and through parts of Athabasca County seeing upwards of 40 mm of rain (**see map 5**). Additionally, many of the dry areas across the south have received 5 to 10 mm or rain, which was certainly welcome for most.

Discussions with AF's Fire Weather Meteorologists (special thanks to Alice Ou)

The hot and dry weather of late has not been the result of a persistent "blocking" high pressure ridge that typically forms and remains stationary for long periods of time, bringing dry weather for several weeks. As of writing (July 11th) a low pressure system is bringing cooler weather and moderate rains to many locations. Over the next few days, this low will move out of the province, and be replaced by a second high pressure system (warm and dry) that is also not expected to persist as in behind it, is another cooler and moisture air mass forecast to arrive early to mid-next week.

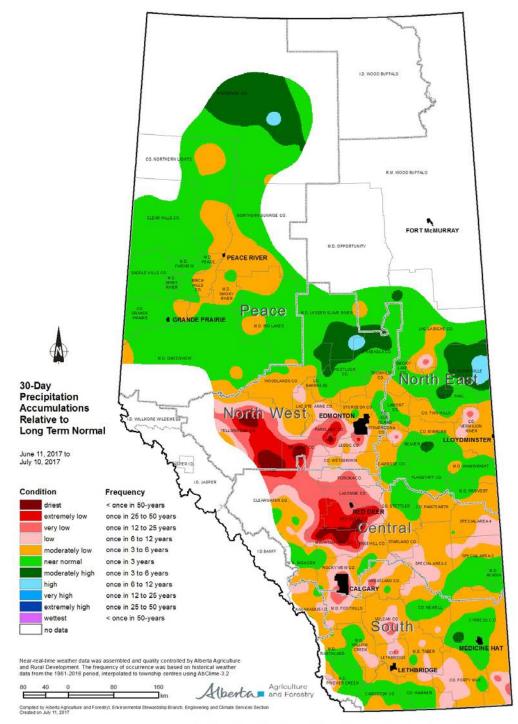
Additional maps can be found at <u>www.agriculture.alberta.ca/maps</u>

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

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

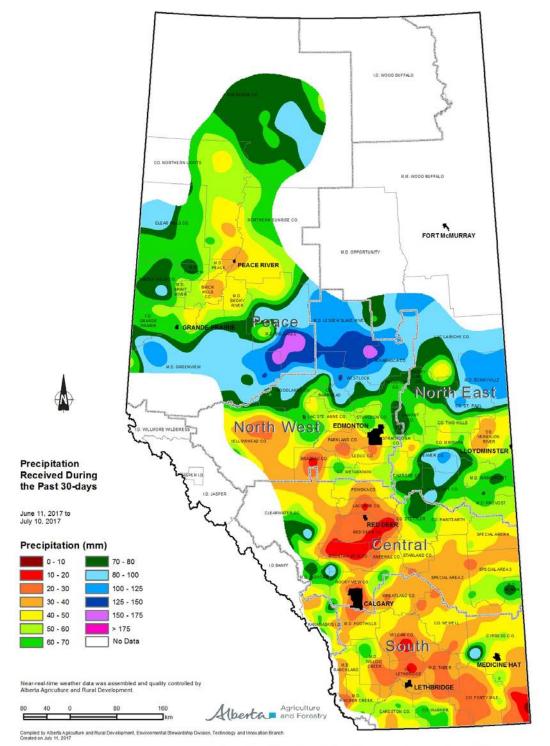
Ralph Wright Manager, Agro-meteorological Applications and Modelling Unit Alberta Agriculture and Forestry Phone: 780-446-6831





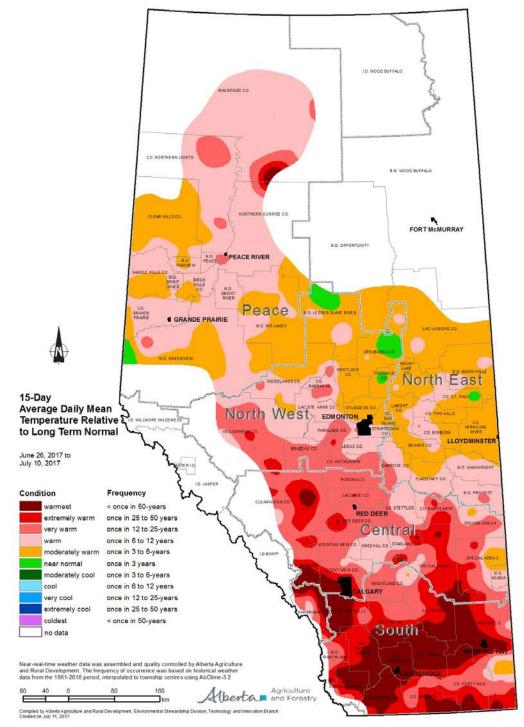
Visit weatherdata.ca for additional maps and meteorological data





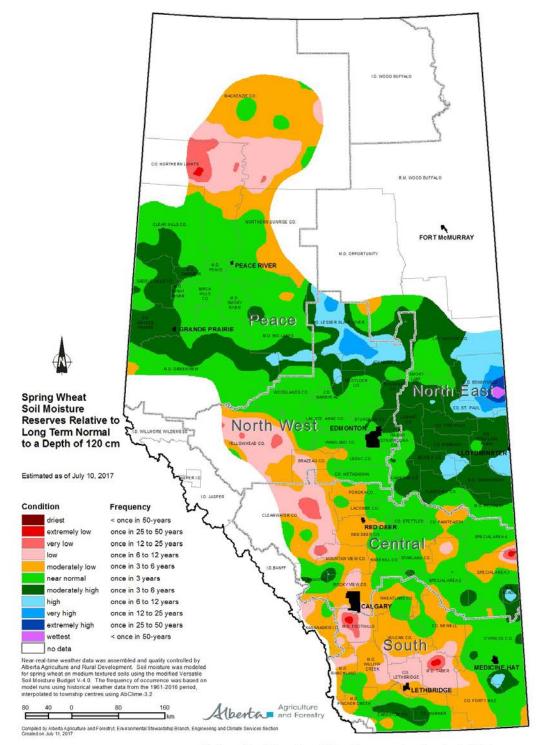
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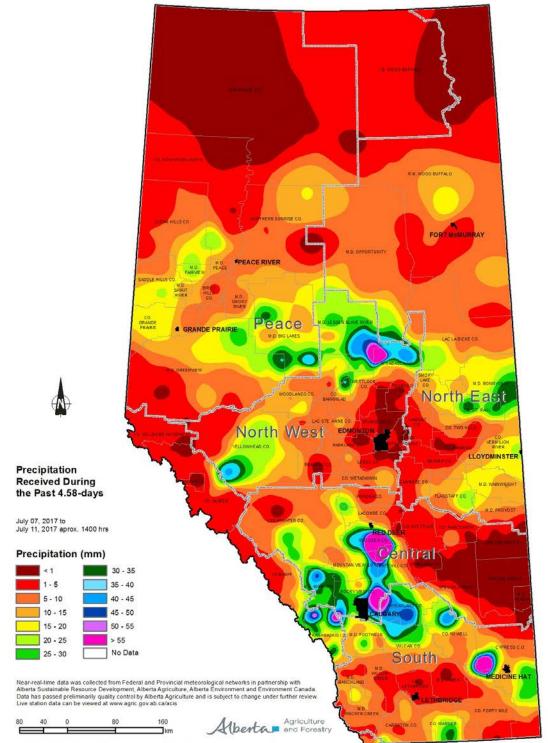
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Map 5



Compiled by Alberta Agriculture and Rural Development, Environmental Stewardship Division, Technology and Innovation Branch Created on July 11, 2017

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