## Moisture Situation Update – August 16, 2016

## Synopsis

Wide spread showers and thunderstorms have continued to dominate weather patterns over the past several weeks. For many areas south of Red Deer, August weather to date has been much wetter than average, particularly in and around Medicine Hat where many stations have recorded well over 70 mm of rain since the beginning of August (see map 1). In addition, many areas lying between Red Deer and Calgary, ranging west along the foothills and well into central Alberta have seen between 60-80 mm. Given the sporadic and localized nature of recent rainfall activity, it is likely some areas have received more than what is reported here.

Looking back 60-days, many stations through central Alberta have reported over 240 mm of rain (see map 2). In contrast, it remains relatively dry across parts of the northern Peace Region, extreme southern parts of southern Alberta and a few widely scattered pockets north of Edmonton and in parts of the western Peace Region where 60-90 mm has fallen, generally translating to about one is six to 12-year lows (see map 3).

Since the end of this spring's dry spell (mid May), most areas across the province have received well above normal rainfall accumulations, with only a few areas recording below normal rainfall accumulations (see map 4). In fact, well over 50% of the agricultural lands have received above normal rains, with large areas seeing accumulations this high on average less than once in 6 to 12 years. Of particular note is a large region between Calgary and Medicine Hat, lying generally north of the TransCanada Highway, which is estimated to have one in 50-year accumulations. Here some lands have seen well over 300 mm of rain in last 90-days (see map 5), which in many cases is 200% above normal. Across the reporting area, lands in and around the Swan Hills, have seen the highest 90-day accumulations anywhere, with well over 400 mm recorded at many stations. In contrast, some areas such as the northern Peace Region and parts of extreme southern Alberta have missed out on abundant rains, receiving between 120 to 140 mm over the past 90-days, which is still near to just below normal.

## Forecast from AF's fire weather section

Many of the widely used forecast models are not in agreement on their medium range predictions, suggesting some uncertainty in upcoming forecasts. Typically at this time of year warm, dry weather is normal, particularly across the southern parts of the province. Here, looking out a week or so (as of August 17<sup>th</sup>), it looks likely that shower and thundershower activity will persist. However, it is expected that this will be less intense and less frequent as have been the rains of past weeks.

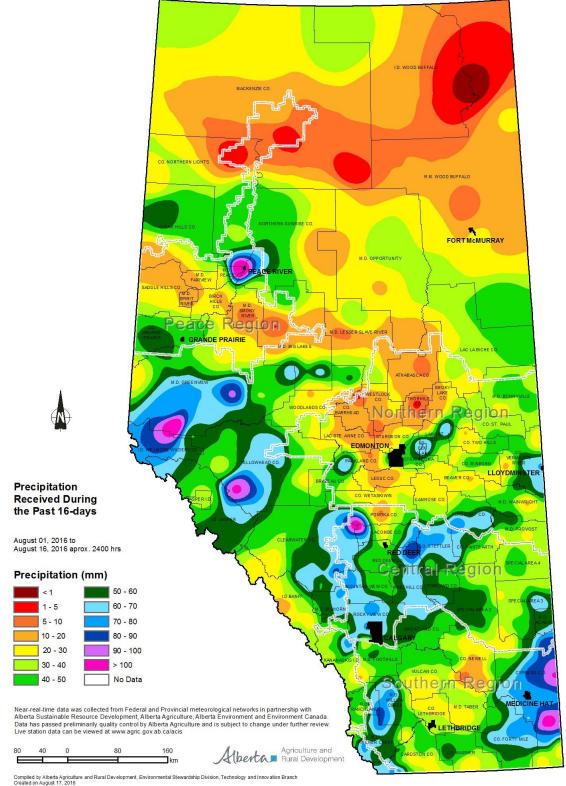
**Real Time Radar** can be used to track and monitor thunderstorms at: <u>http://www.agric.gov.ab.ca/acis/weather-radar.jsp</u>

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

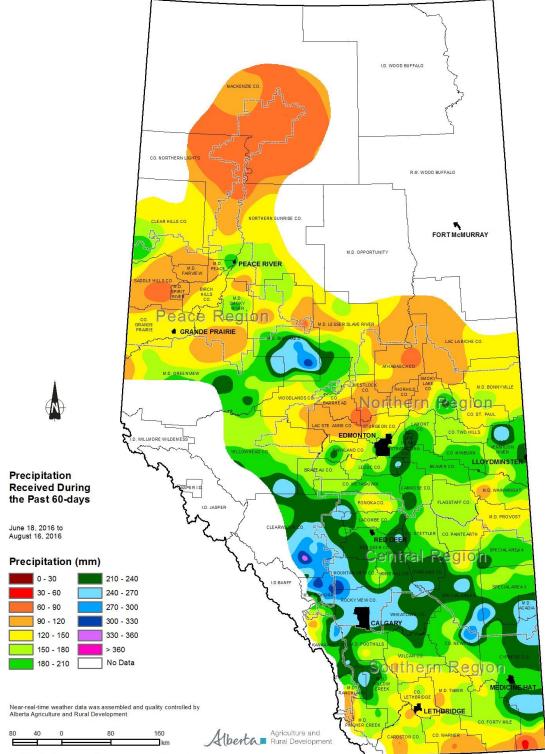
Near-real-time hourly station data can be viewed/downloaded at <a href="http://www.agriculture.alberta.ca/stations">www.agriculture.alberta.ca/stations</a>

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

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

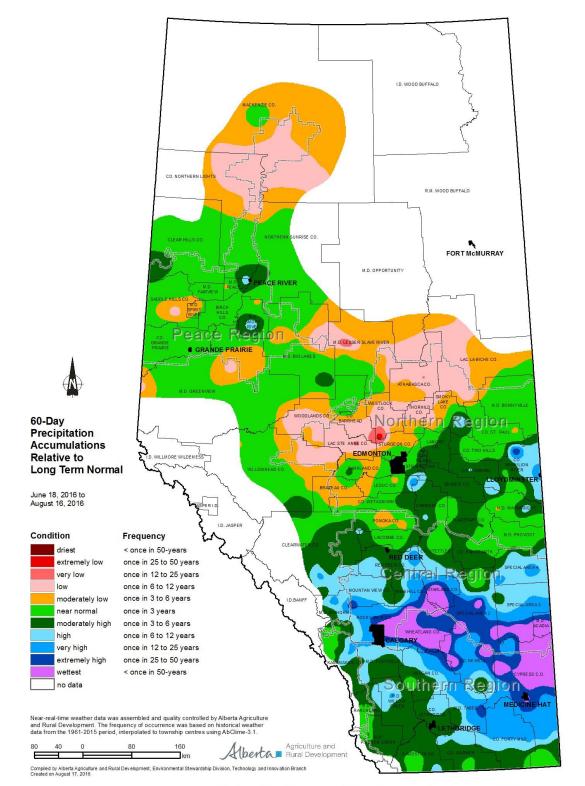


Visit weatherdata.ca for additional maps and meteorological data

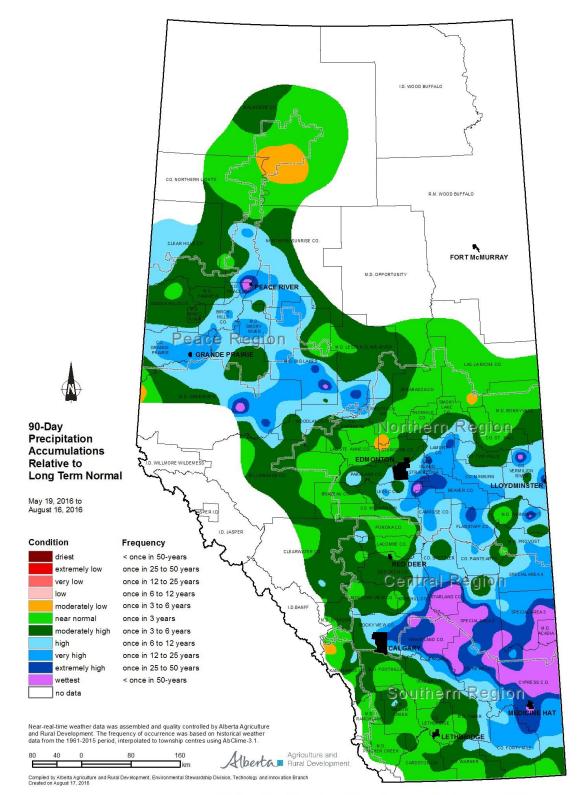


Compiled by Alberta Agriculture and Rural Development, Environmental Stewardship Division, Technology and Innovation Branch Created on August 17, 2016

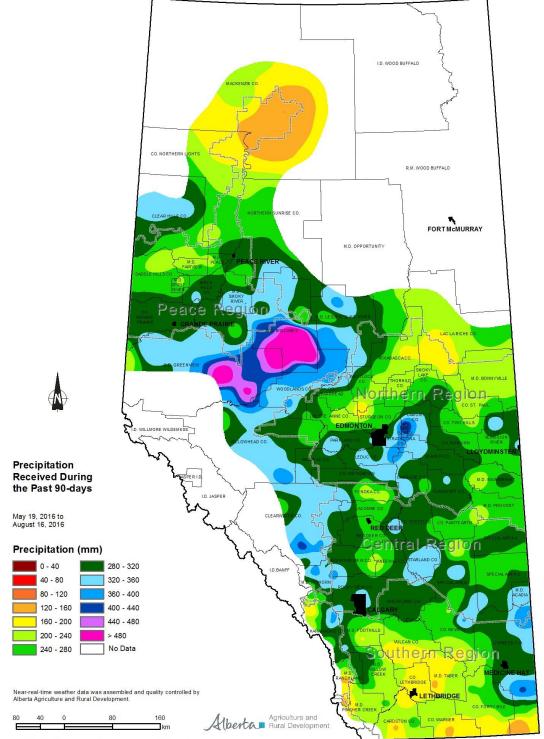
Visit weatherdata.ca for additional maps and meteorological data



Visit weatherdata.ca for additional maps and meteorological data



Visit weatherdata.ca for additional maps and meteorological data



Compiled by Alberta Agriculture and Rural Development, Environmental Stewardship Division, Technology and Innovation Branch Created on August 17, 2016

Visit weatherdata.ca for additional maps and meteorological data