

## Moisture Situation Update – July 22, 2013

### Synopsis:

Over the past several days, large-scale, convective activity has dominated weather patterns, bringing significant locally intense storm events to many areas. Over the past week, in general, most of the agricultural areas have seen at least some form of precipitation, with total accumulations being highly variable over short distances. Locally, some areas have experienced upwards of 50 mm of precipitation, with several stations recording accumulations in excess of 20 mm in a single hour.

### 7-day precipitation accumulations as of July 22, 2013 -see map

- Over the past week precipitation patterns across the agricultural area have been highly variable, ranging from less than 1 mm in the extreme southwest, to over 45 mm at many widely scattered locations ranging from the southern portions of the province, up as far north as the Peace Region.
- Despite the high variability, most areas between Lethbridge and as far north as the town of Peace River have seen at least 15 to 20 mm of precipitation, which is adequate to maintain healthy crop growth.

### 60-day precipitation accumulations relative to long term as of July 22, 2013 -see map

- Over the past 60-days, most of the agricultural areas have seen at least near normal or above, precipitation accumulations.
- Moderately low accumulations have been recorded throughout the extreme northern Peace Region, accompanied by well above average temperatures. This combination of relatively low moisture and high heat, may have an adverse impact on yields in those areas that have been missed by localized showers.
- Generally south of Red Deer, precipitation accumulations are at least near normal, with many areas experiencing well above normal accumulations.
- Areas just north of the City of Calgary are classified as having accumulations this high, on average, less than once in 50 years.

### Perspective:

- The growing season of 2013 stands in stark contrast to the growing seasons of the recent past. This year, large extremely dry areas are all but absent, along with the excessive heat that often comes with lack of moisture. In general, growing conditions are favorable over a large area of the province, with the exception of some areas around Calgary and north and east of the city, where excessive moisture may be reducing yields in low lying field areas. However, despite this, growing conditions are generally favorable, particularly on well drained sites.
- Looking back 50-years, through the ACIS map archives we need to go back 20-years (1993) in order to see a year that was generally drought free across the agricultural areas of the province. Prior to this, 1986, 1980, 1978 and 1964, were largely drought free.
- Generally north of the TransCanada Highway, August is typically drier than June and July, with a real shift to significantly drier conditions, historically occurring through the latter half of the month.
- South of the TransCanada Highway, the drying trend generally starts six weeks earlier, during the first half of July. Fortunately for many in the south, typical dry July weather did manifest itself this year.

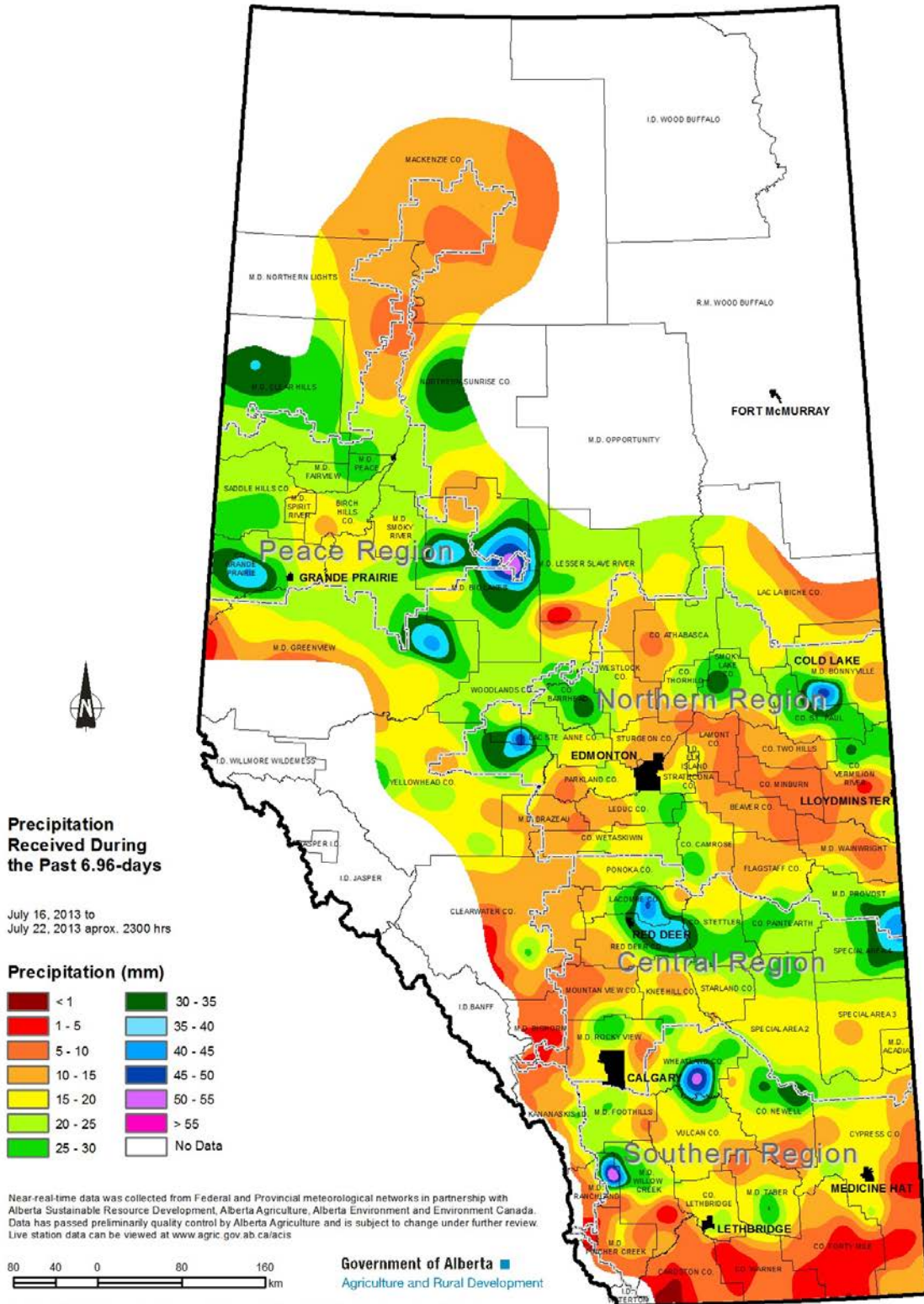
**Near-real-time hourly station** data can be viewed/downloaded at [www.agriculture.alberta.ca/stations](http://www.agriculture.alberta.ca/stations)

Note: Data has about a two hour lag and is displayed in MST (add one hour for daylight savings time)

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