

## Moisture Situation Update – July 24, 2011

### Forecast from SRD's Fire Weather Section

Thanks to Elizabeth Summers

- Another low pressure system is set to move into the province late today, intensifying around the Red Deer area bringing moderate amounts (5 to 15 mm) of precipitation to some areas across the south-half of the province, with locally higher amounts, due to thunderstorms.
- **Tuesday**, an upper low will develop over southeastern Alberta bringing intense thunderstorms with moderate to heavy rain over a large areas stretching from Lloydminster to Medicine Hat extending as far west as Red Deer. Some areas may see as much as 40 mm of rain.
- **Wednesday**, expect scattered thunderstorm activity across most of the province
- **Thursday**, generally clear with scattered thunderstorms developing across the northern-half of the province.
- **Friday** another system moves in from the Pacific Northwest, bringing with it, scattered thundershowers and possible periods of rain across the northwest portions of the province, including the northern Peace Region.

### Note:

Over the past several days, intense thunderstorm activity has been the dominate driver in delivering precipitation to many areas across the province. As a result, some localized areas may have seen upwards of 50 mm of precipitation or more, than that which is depicted in these maps.

### Precipitation since July 20 as of July 24, 2011 2300 hrs -see map

- Over the past few days the greatest amounts of precipitation (60 to 70 mm) were recorded in and around the Legal area, just north of the City of Edmonton.
- Many areas extending as far south as Calgary and as far north as Peace River received more than 20 mm.

### Precipitation over the past 42 days as of July 24 2300 hrs -see map

- Upwards of 400 mm has been recorded at three stations in the Swan Hills with the most (499 mm) reported at the Flat Top station, just south of the town of Slave Lake.
- Many areas north and west of Edmonton extending up to the town of Peace River have seen over 240 mm of precipitation.
- **Perspective:** The average annual precipitation from Edmonton and north ranges from about 350 mm in the central Peace region to over 600 mm across parts of the Swan Hills.

### Growing Season Precipitation Relative to Normal as of July 24 2011 -see map

- Most areas across the province have seen **at least** near normal growing season precipitation to date.
- Several large areas north and west of Edmonton, extending well up into the Peace region are estimated to be 1 in 25 year highs.
- Elsewhere, province wide, there are several scattered pockets classified as 1 in 6 to 1 in 12 year highs, likely due to intense localized thunderstorm activity.
- The Northern tip of the Peace Region, remains relatively dry but the forecast for the next week is promising some rain.

**Additional Maps** can be found at <http://www.agric.gov.ab.ca/app116/quick.jsp>.

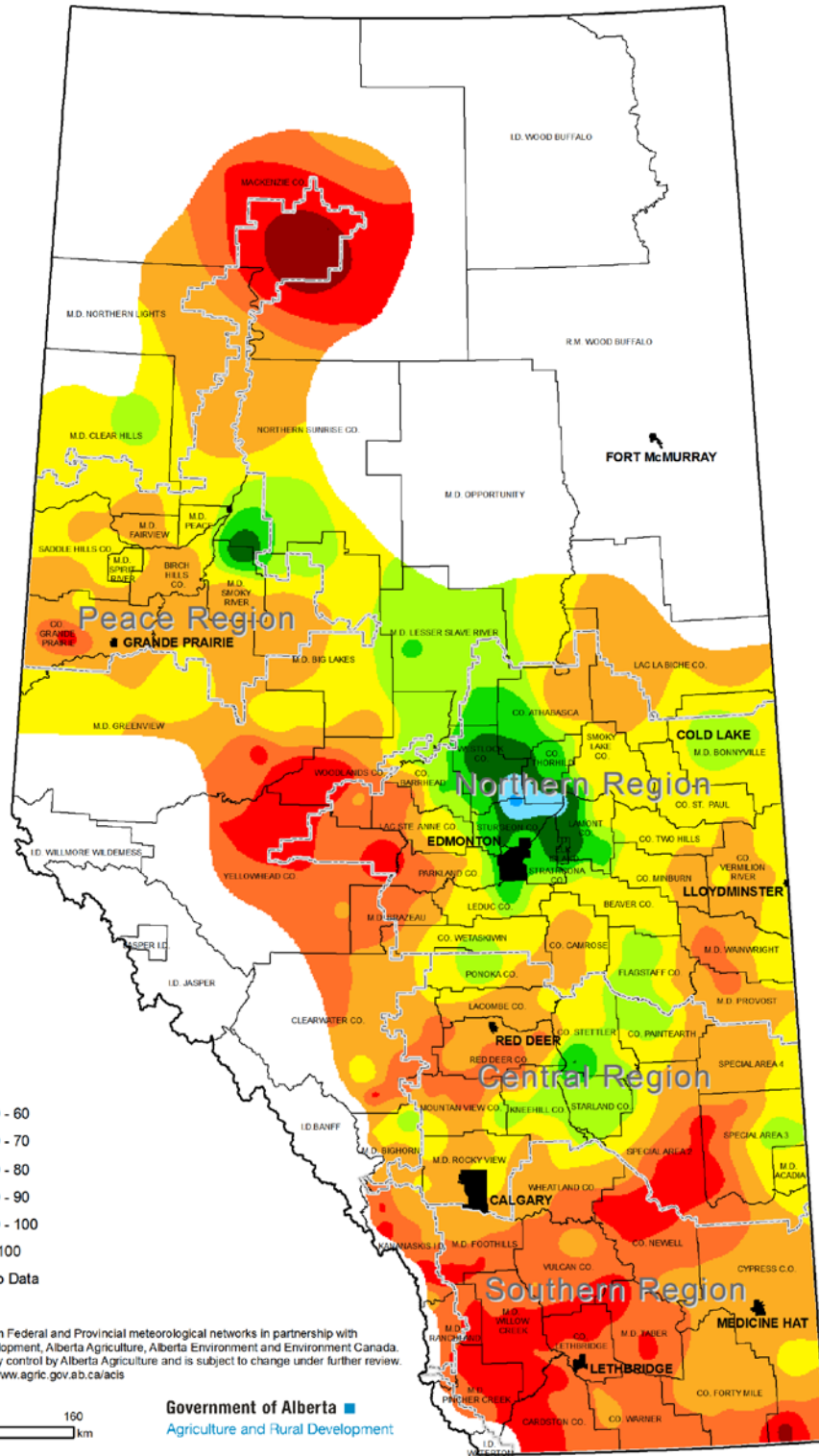
**Near-real-time hourly station** data can be viewed/downloaded at <http://www.agric.gov.ab.ca/app116/stationview.jsp>.

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

### Ralph Wright

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**Precipitation Received During the Past 4.96-days**

July 20, 2011 to  
July 24, 2011 aprox. 2300 hrs

**Precipitation (mm)**

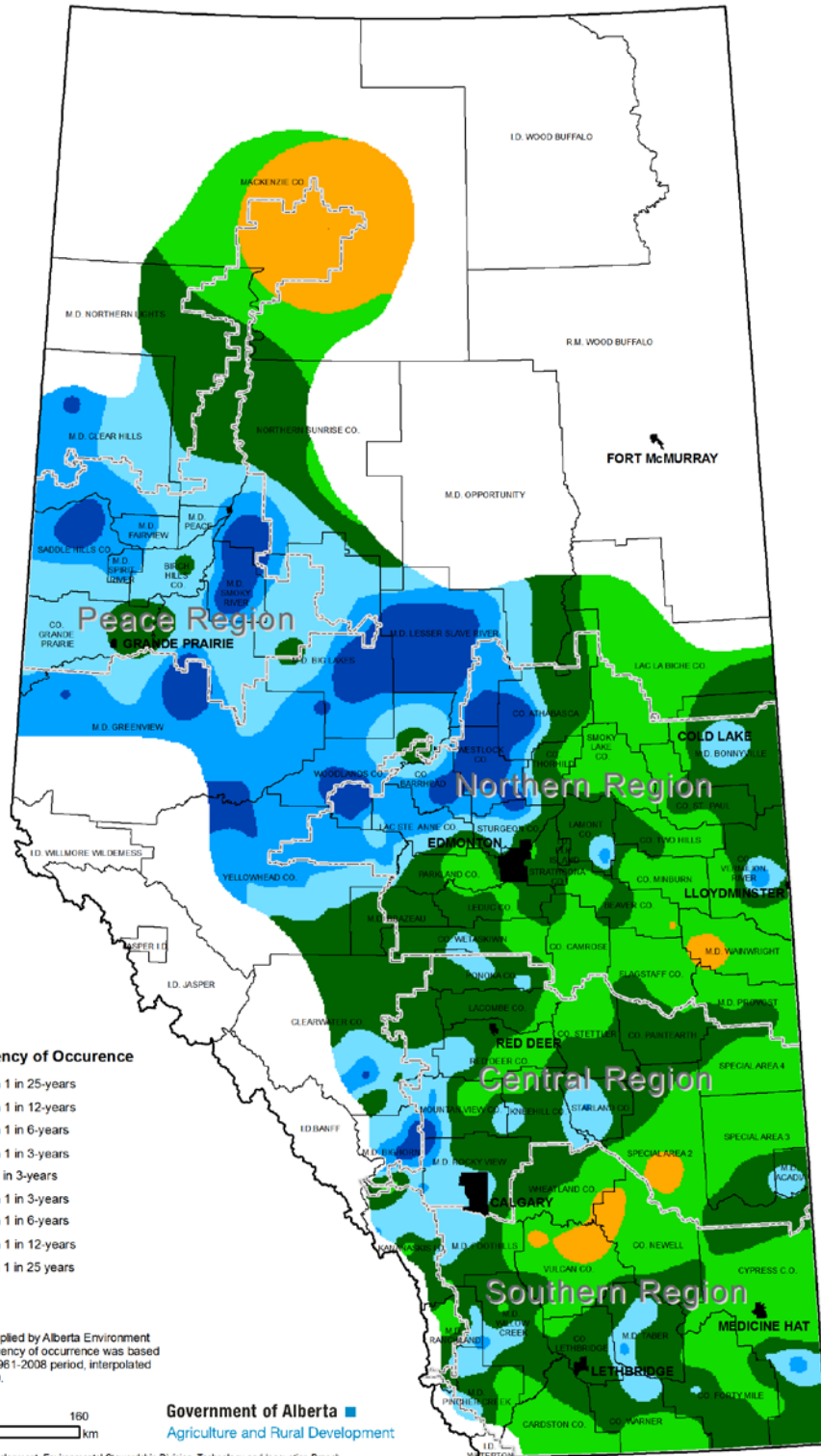
	< 1		50 - 60
	1 - 5		60 - 70
	5 - 10		70 - 80
	10 - 20		80 - 90
	20 - 30		90 - 100
	30 - 40		> 100
	40 - 50		No Data

Near-real-time data was collected from Federal and Provincial meteorological networks in partnership with Alberta Sustainable Resource Development, Alberta Agriculture, Alberta Environment and Environment Canada. Data has passed preliminary quality control by Alberta Agriculture and is subject to change under further review. Live station data can be viewed at [www.agric.gov.ab.ca/acs](http://www.agric.gov.ab.ca/acs)



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Compiled by Alberta Agriculture and Rural Development, Environmental Stewardship Division, Technology and Innovation Branch  
Map created on July 25, 2011



**Growing Season  
Precipitation  
Accumulations  
Relative to  
Long Term Normal**

April 01, 2011 to  
July 24, 2011

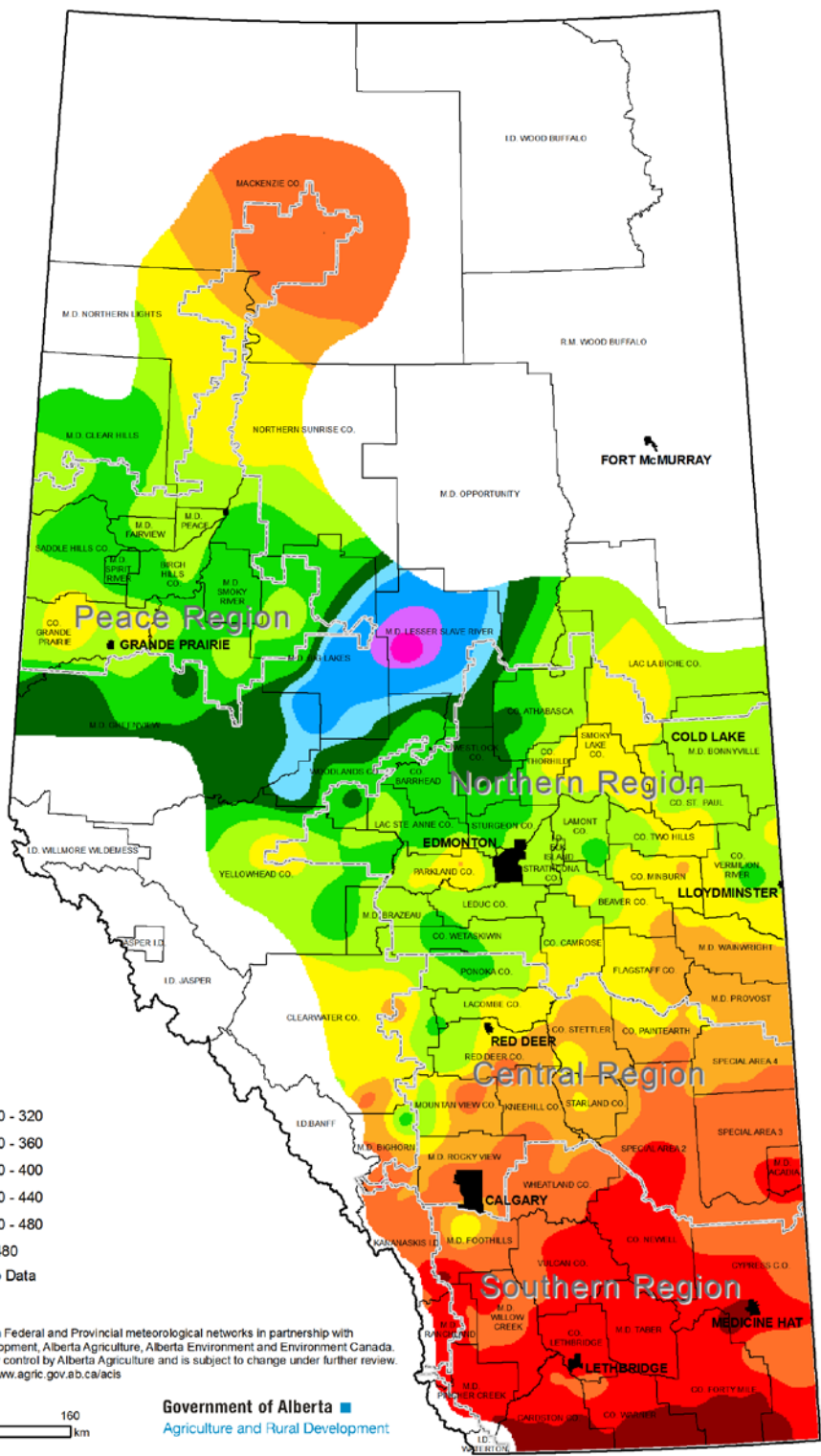
Condition	Frequency of Occurrence
extremely low	less than 1 in 25-years
very low	less than 1 in 12-years
low	less than 1 in 6-years
moderately low	less than 1 in 3-years
near normal	at least 1 in 3-years
moderately high	less than 1 in 3-years
high	less than 1 in 6-years
very high	less than 1 in 12-years
extremely high	less than 1 in 25-years

Near-real-time weather data was supplied by Alberta Environment and Environment Canada. The frequency of occurrence was based on historical weather data from the 1961-2008 period, interpolated to township centres using AbClim-1.0.



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**Precipitation Received During the Past 41.96-days**

June 13, 2011 to July 24, 2011 aprox. 2300 hrs

**Precipitation (mm)**

0 - 40	280 - 320
40 - 80	320 - 360
80 - 120	360 - 400
120 - 160	400 - 440
160 - 200	440 - 480
200 - 240	> 480
240 - 280	No Data

Near-real-time data was collected from Federal and Provincial meteorological networks in partnership with Alberta Sustainable Resource Development, Alberta Agriculture, Alberta Environment and Environment Canada. Data has passed preliminary quality control by Alberta Agriculture and is subject to change under further review. Live station data can be viewed at [www.agric.gov.ab.ca/lacs](http://www.agric.gov.ab.ca/lacs)



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