

Moisture Situation Update – May 22, 2013

Synopsis:

North of Red Deer, many areas saw snow packs persisting well into April, with much of the province seeing an April this cold, fewer than half a dozen times over the past 50 years. In stark contrast, May marked the beginning of warm, generally dry weather throughout the province, with most areas enjoying sustained above average temperatures. This was precisely what was needed to kick start spring seeding. Unfortunately, soil moisture reserves are dwindling due to lack of rainfall, but our wet season (June and July) is just around the corner.

April 2013 temperatures relative to long term normal –see map

- The coolest areas were generally north of the TransCanada highway and east of Highway 2 with many areas seeing an April this cold on average less than once to 25 years.
- South of the TransCanada and west of Highway 2, most areas were still cooler than normal, seeing an April this cold only once in 6 to 12 years

15-day Temperatures relative to long term normal as of May 20th, 2013 –see map

- As is often the case in Alberta, significant shifts in weather patterns occur over the span of a few days. The first two weeks in May was yet another example of this, with parts of the province seeing the warmest sustained temperatures during the first half of May in over 50 years, perfect for seeding operations.

Growing season precipitation accumulations relative to long term normal as of May 20th, 2013 –see map

- Generally below normal precipitation accumulations have occurred over most of the province with many areas seeing conditions this dry on average less than once in 3 to 6 years.
- Deeper deficits are beginning to develop through the central Peace Region and along TransCanada highway, between Calgary and Brooks. However for most areas, the last week in May typically marks the start of the wet season, which persists until the first week of July in southern Alberta, and well into early August throughout the Peace Region.

Spring wheat soil moisture reserves relative to long term normal as of May 20th, 2013 –see map

- Last year, many areas saw below normal precipitation throughout August and September. This, in addition to warm dry spring conditions, has left soil moisture reserves depleted across much of Alberta, particularly along the TransCanada Highway, southeast of Edmonton and throughout the Lac La Biche area. Some of these locations are seeing reserves this low less than once in 50 years.
- However the wet season still lies ahead and there is ample time to replenish soil moisture reserves with a return to near normal precipitation accumulations.

Perspective

- Soil moisture reserves may be low in many places; however, most areas see a marked increase in precipitation accumulations, starting on average about the last week in May.
- Late snow melt and a quick start to spring has left most areas with adequate surface moisture. The soil moisture deficits portrayed here are typically at deeper levels and should cause no concern given a return to normal precipitation patterns.

Interesting facts

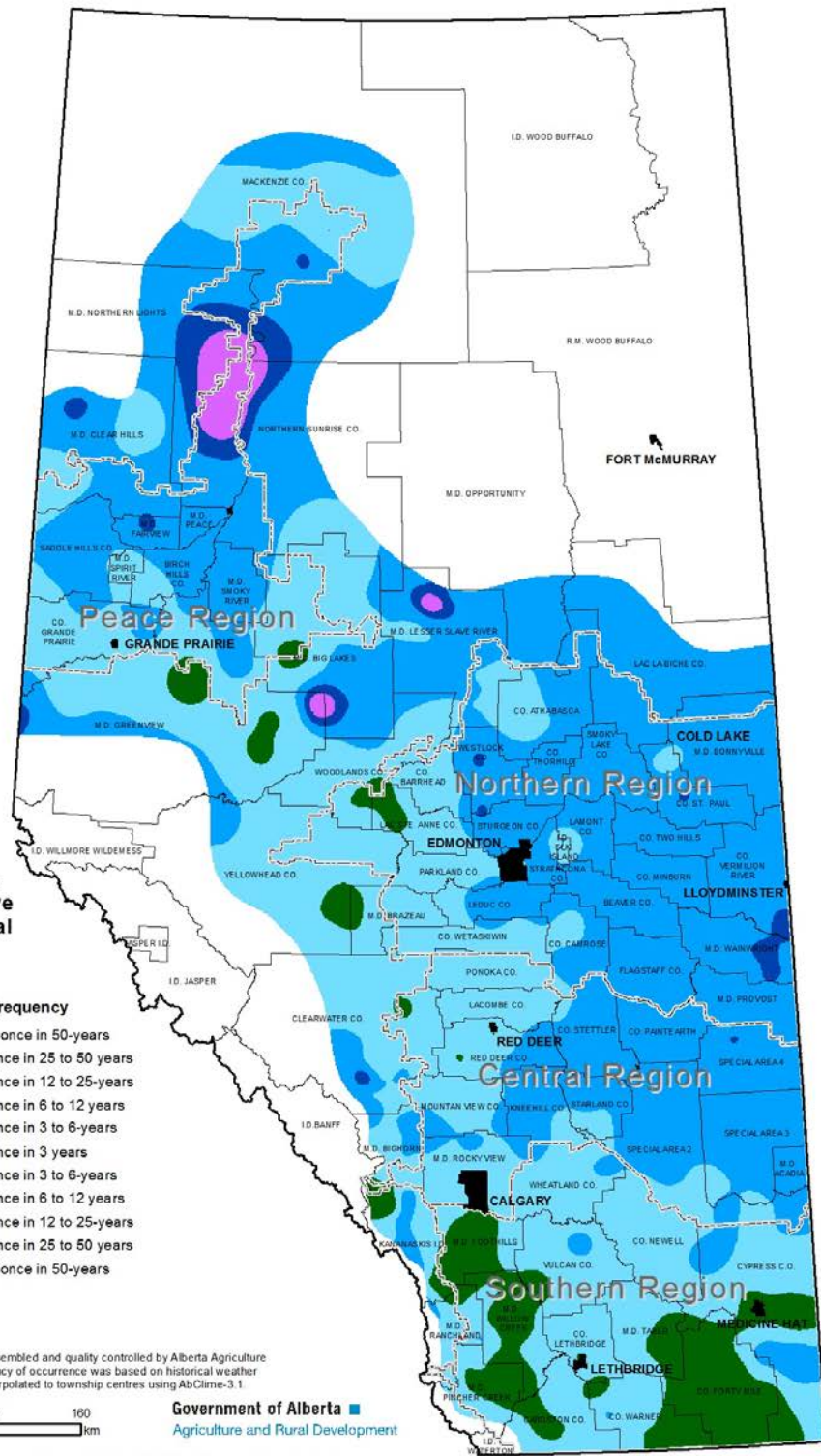
- You can now track local thunderstorms updating every 10 minutes. This Google map interface allows you to zoom right to your section with storm track accuracy generally within about 1000 meter: agriculture.alberta.ca/acis/weather-radar
- You can also view temperature map showing where the frost or excessive heat may have occurred in your area agriculture.alberta.ca/acis/weather-conditions-map

Additional Maps can be found at www.agriculture.alberta.ca/maps

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 (add one hour for daylight savings time)

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**April, 2013
Average Daily Mean
Temperature Relative
to Long Term Normal**

April 01, 2013 to
April 30, 2013

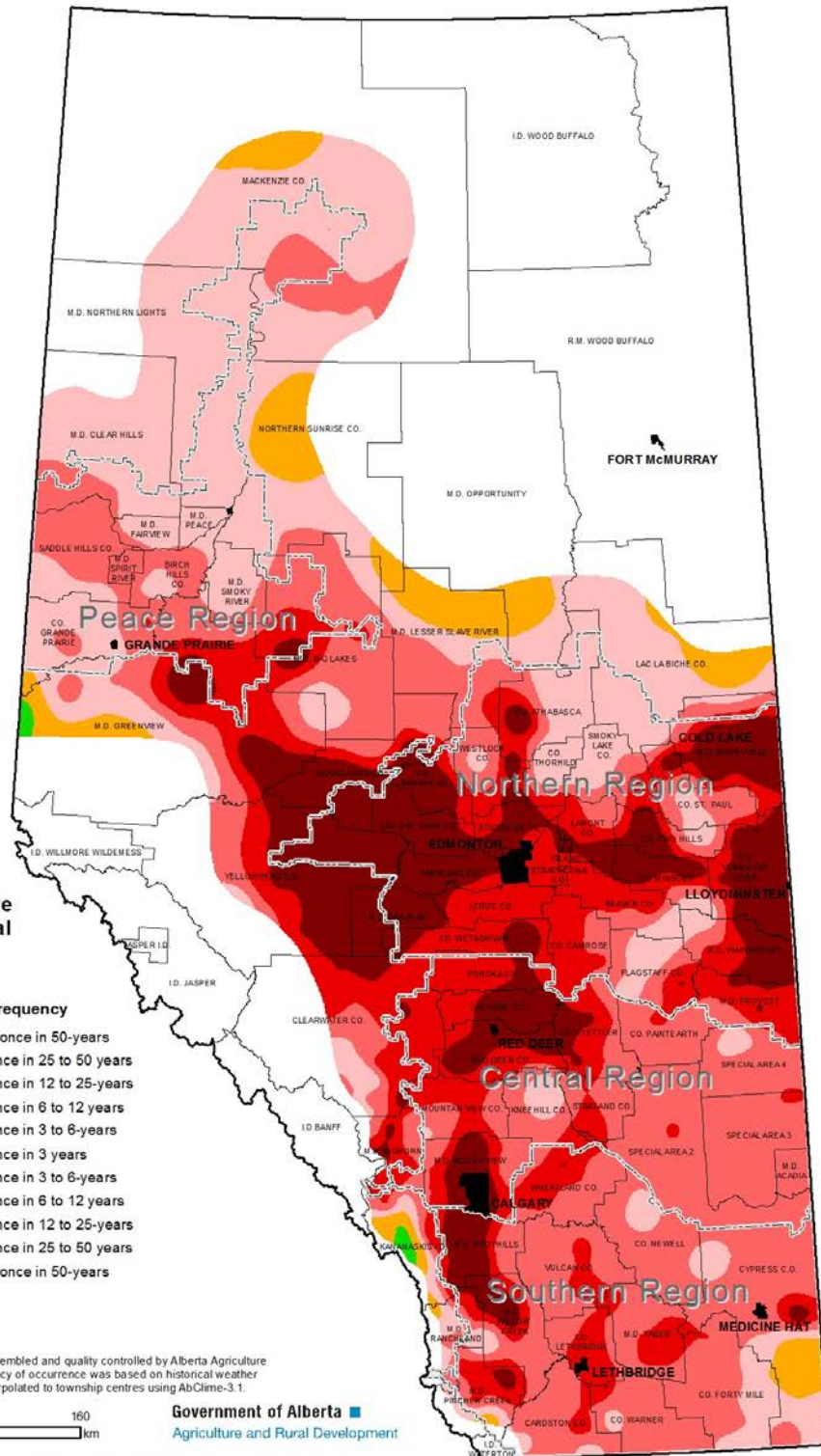
Condition	Frequency
 warmest	< once in 50-years
 extremely warm	once in 25 to 50-years
 very warm	once in 12 to 25-years
 warm	once in 6 to 12 years
 moderately warm	once in 3 to 6-years
 near normal	once in 3 years
 moderately cool	once in 3 to 6-years
 cool	once in 6 to 12 years
 very cool	once in 12 to 25-years
 extremely cool	once in 25 to 50 years
 coldest	< once in 50-years
 no data	

Near-real-time weather data was assembled and quality controlled by Alberta Agriculture and Rural Development. The frequency of occurrence was based on historical weather data from the 1961-2010 period, interpolated to township centres using AbClimate-3.1.



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Compiled by Alberta Agriculture and Rural Development, Environmental Stewardship Division, Technology and Innovation Branch
Created on May 22, 2013



**15-Day
Average Daily Mean
Temperature Relative
to Long Term Normal**

May 06, 2013 to
May 20, 2013

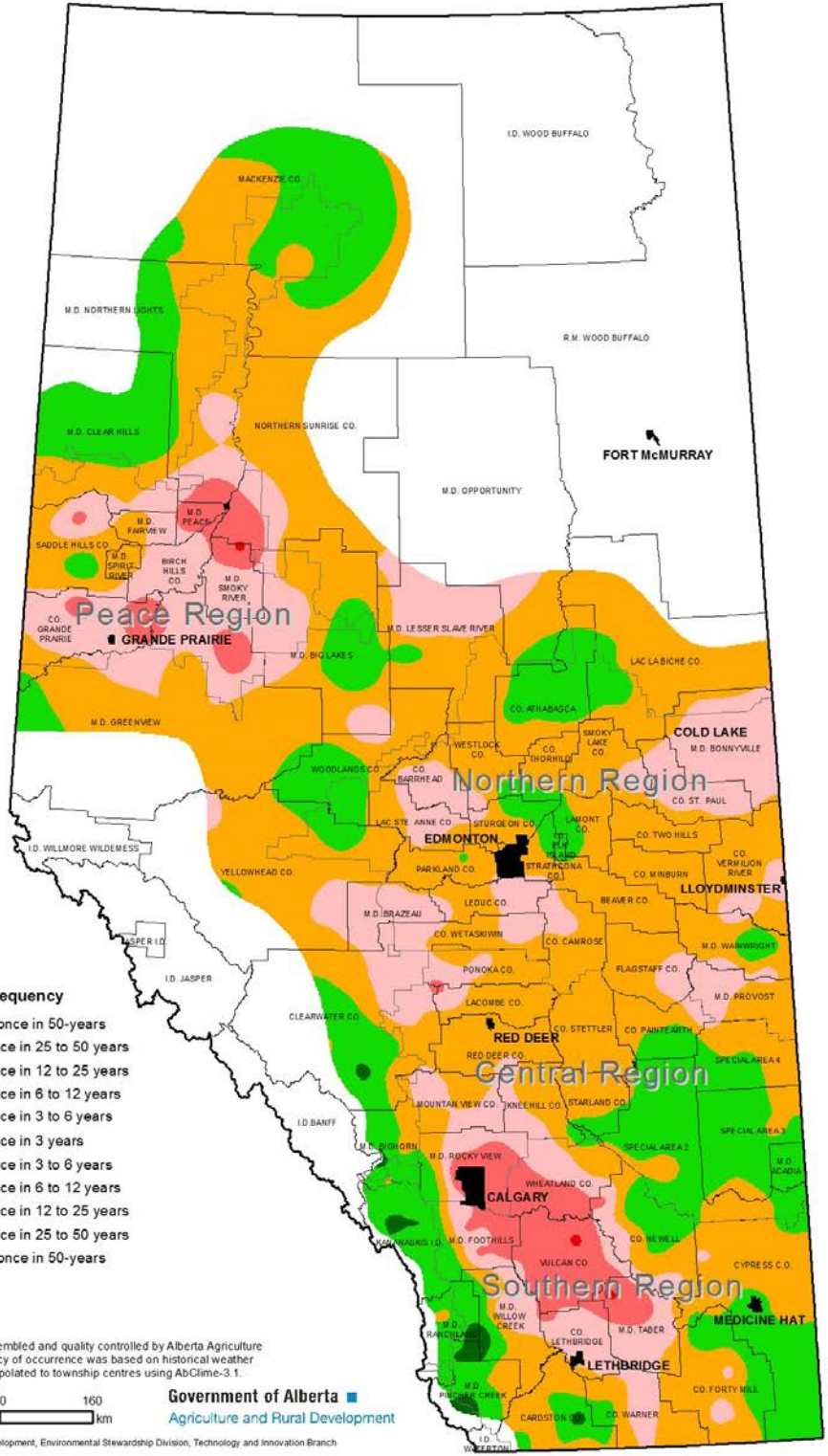
Condition	Frequency
	warmest
	extremely warm
	very warm
	warm
	moderately warm
	near normal
	moderately cool
	cool
	very cool
	extremely cool
	coldest
	no data

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

April 01, 2013 to
May 20, 2013

Condition	Frequency
	< once in 50-years
	once in 25 to 50 years
	once in 12 to 25 years
	once in 6 to 12 years
	once in 3 to 6 years
	once in 3 years
	once in 3 to 6 years
	once in 6 to 12 years
	once in 12 to 25 years
	once in 25 to 50 years
	< once in 50-years
	no data

Near-real-time weather data was assembled and quality controlled by Alberta Agriculture and Rural Development. The frequency of occurrence was based on historical weather data from the 1961-2010 period, interpolated to township centres using AbClimate-3.1.

80 40 0 80 160 km

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