

## Moisture Situation Update – June 9, 2019

### Synopsis

Since the start of the growing season, April 1, 2019, large parts of Alberta's agricultural areas have been much drier than normal (**see map 1**). The driest areas cover three main parts of the province, each with some locales grading down to 1 in 50 year lows. This includes the north-half of the Peace Region, parts of Athabasca and Lac la Biche Counties, and much of the east Central Region along with north-half of the Southern Region. Many of these areas have seen less than 40 mm of precipitation since April 1<sup>st</sup>, with the driest areas receiving under 20 mm. This is more than 50 mm below the long term normal accumulations that range between 70 to 90 mm (**see map 2**).

Over the past 9 days, two major storm systems brought significant relief to the central third of the province (**see map 3**). Without these events the current dry conditions would have been more wide spread. Most of the recent rains have fallen across a wide area ranging from the extreme southern Peace Region, extending down as far as Olds in the west, and far as Wainwright, along the east side of the province. Within this wide area most stations recorded at least 20 mm rainfall, providing at least some short term relief, ranging to upwards of 60 mm just east of Camrose.

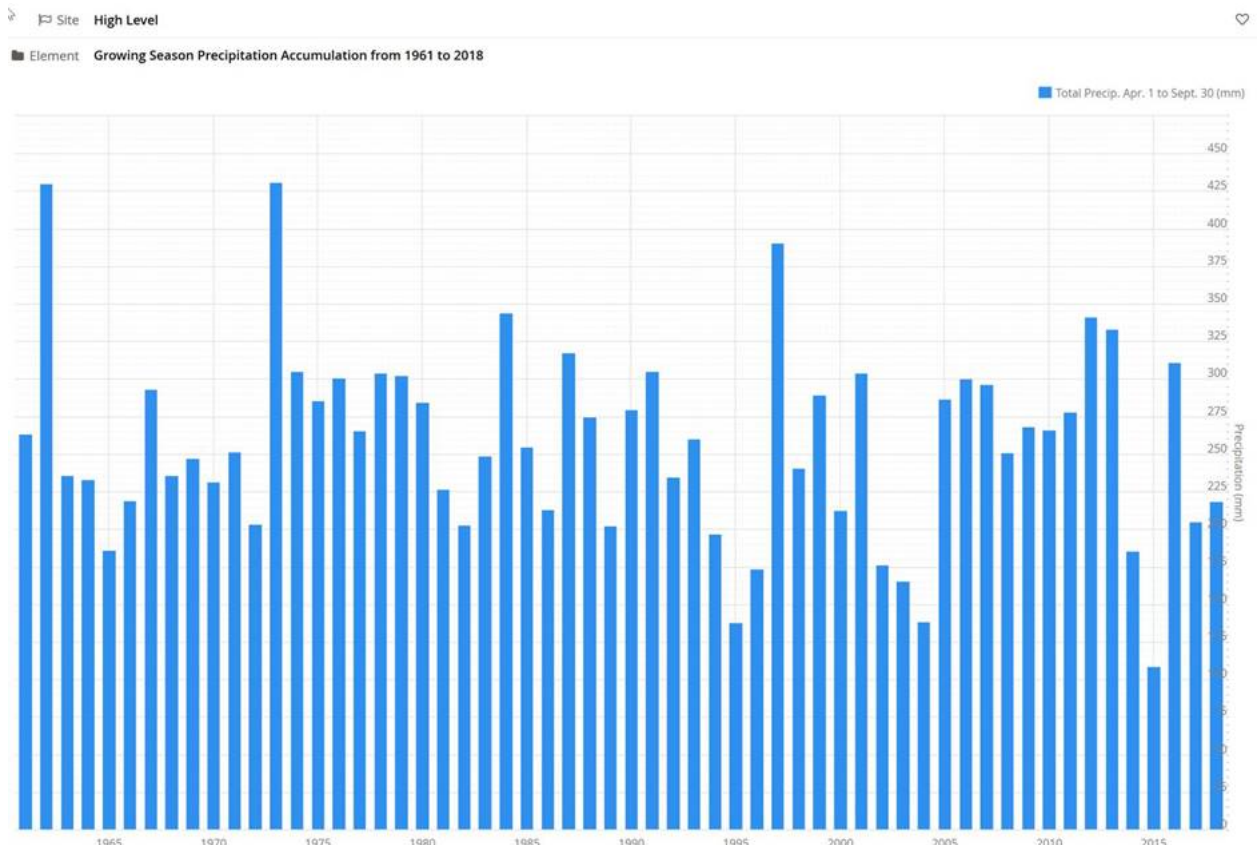
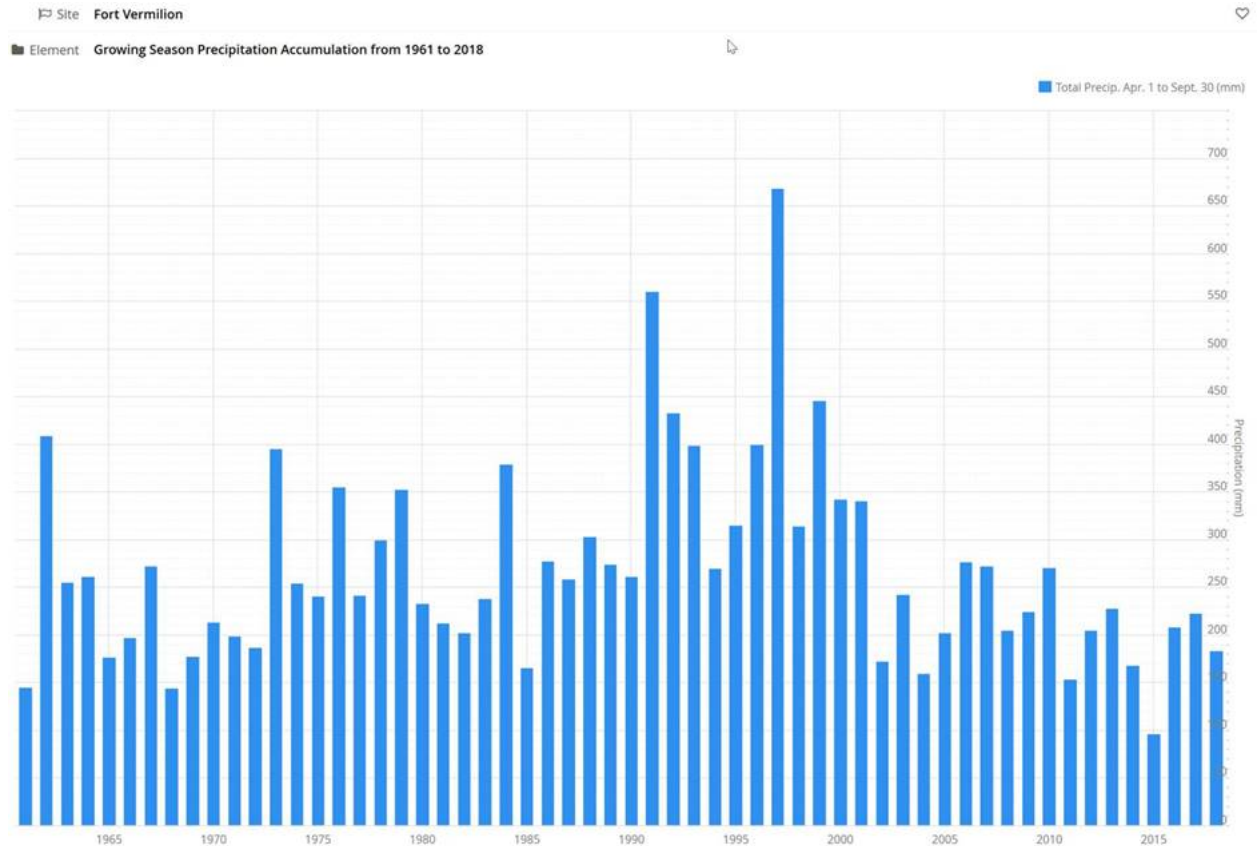
More rains will be needed very soon across most areas of the province.

Historically, June is the wettest month in the season for those lands lying south of Grand Prairie, with July being the wettest month of the season north of this (**see map 4**). We are now just less than two weeks into the wettest part of the season, so there is still time to receive good moisture following the exceptionally dry conditions that have persisted this spring.

### Historical Growing Season precipitation patterns across the Northern Peace Region 1961 to 2018

- It's been dry across some parts of the Northern Peace Region for 17-years in a row, starting back in 2002, with little recovery, particularly east of the Peace River in and around Fort Vermillion (**see Graph 1**).
- While this is unusual, it's not wholly unprecedented. Looking back as far as 1961, there was a similar dry spell from 1961 to 1973, which lasted 13-years with only one wet year interrupting this episode.
- What's more interesting is the period prior the current dry spell. From 1991 to 2001 there was a string of 11-wet years. They began abruptly and ended abruptly.
- In contrast, only 80 km away, High Level has not seen this same 17-year dry spell. In fact during this same time frame there was a 9-year period of relatively wet weather, spanning the 2005 to 2013 period (**see Graph 2**).

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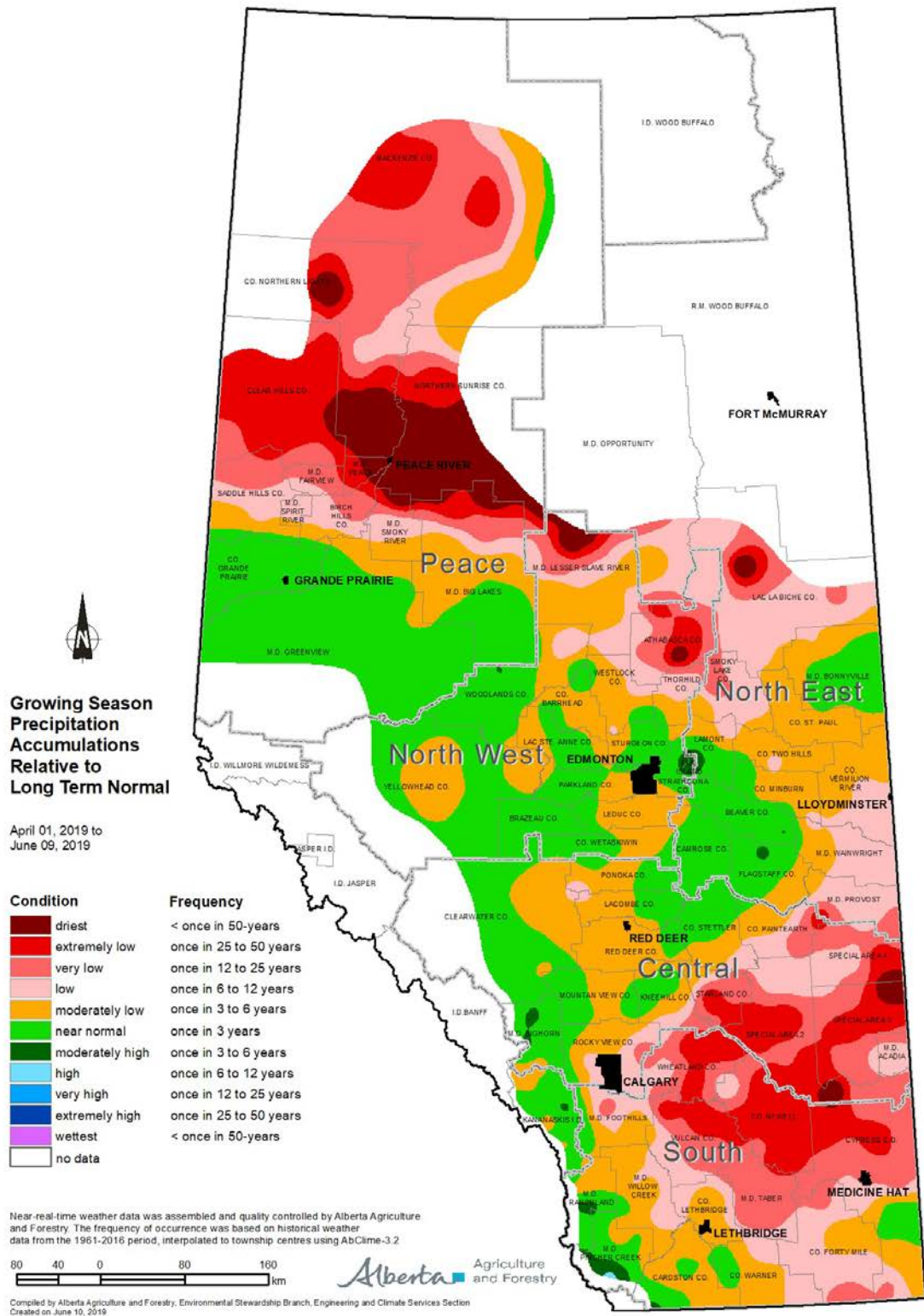
Near-real-time hourly station data can be viewed/downloaded at [www.agriculture.alberta.ca/stations](http://www.agriculture.alberta.ca/stations)

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

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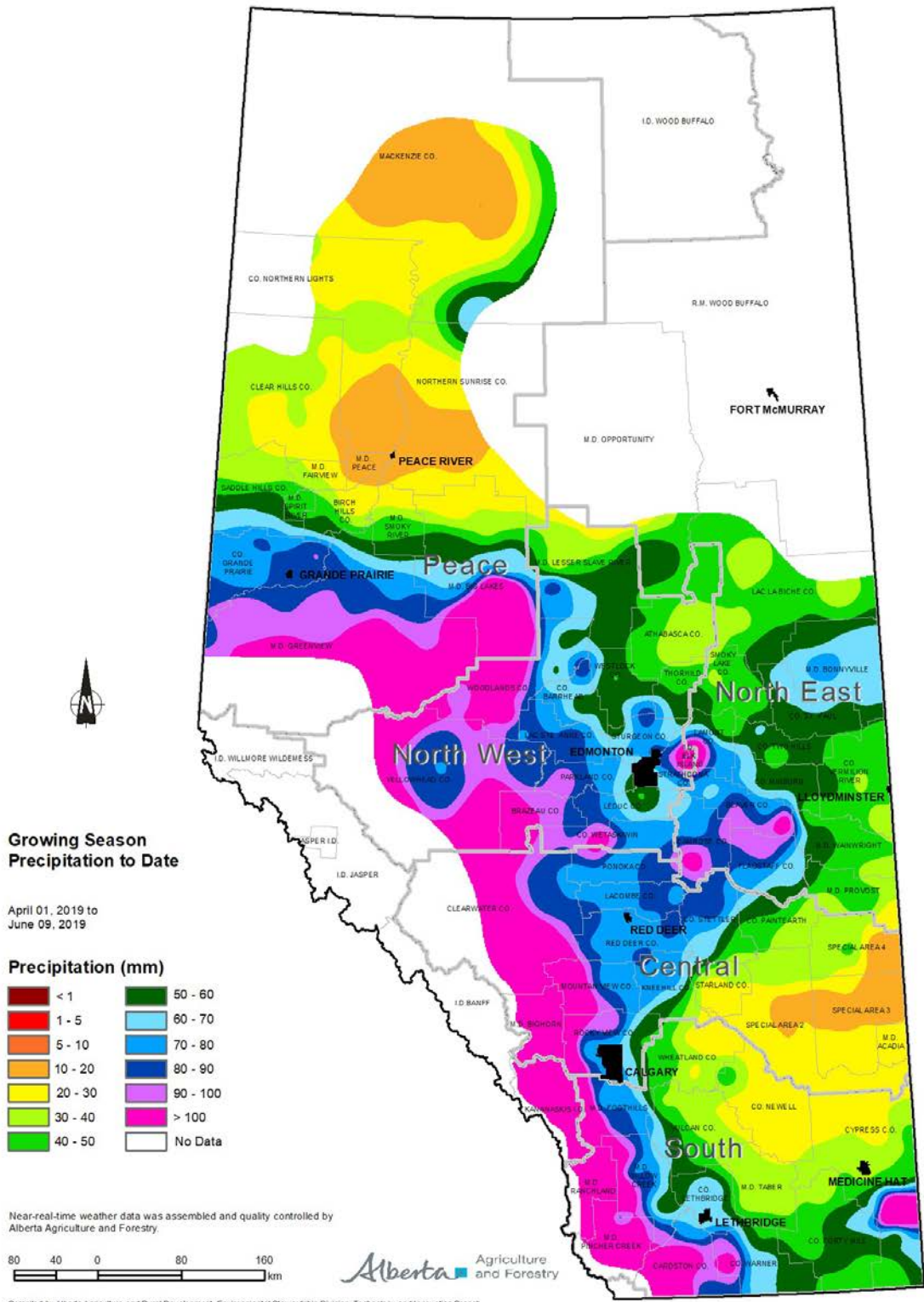
## Map 1



Visit [weatherdata.ca](http://weatherdata.ca) for additional maps and meteorological data

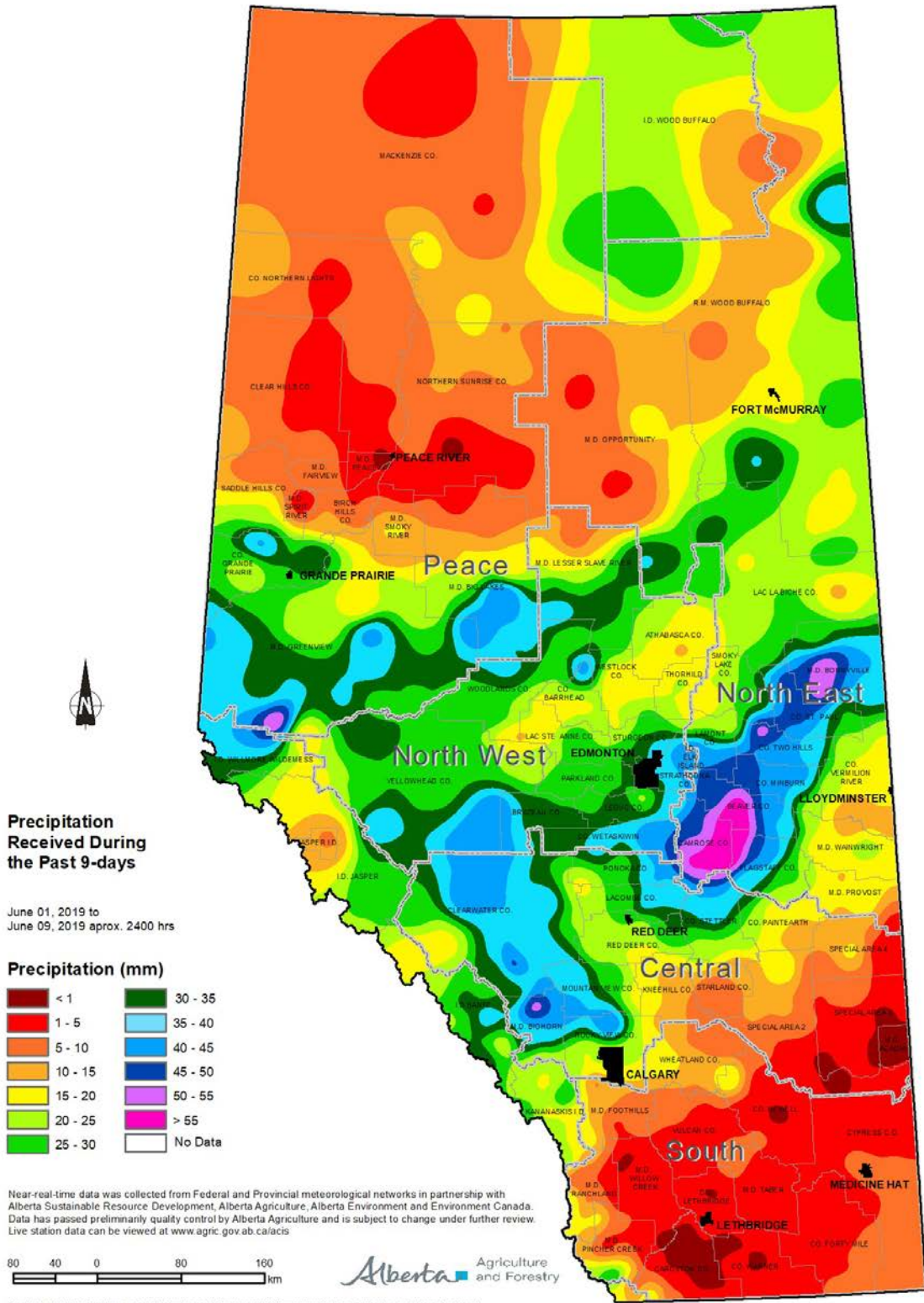
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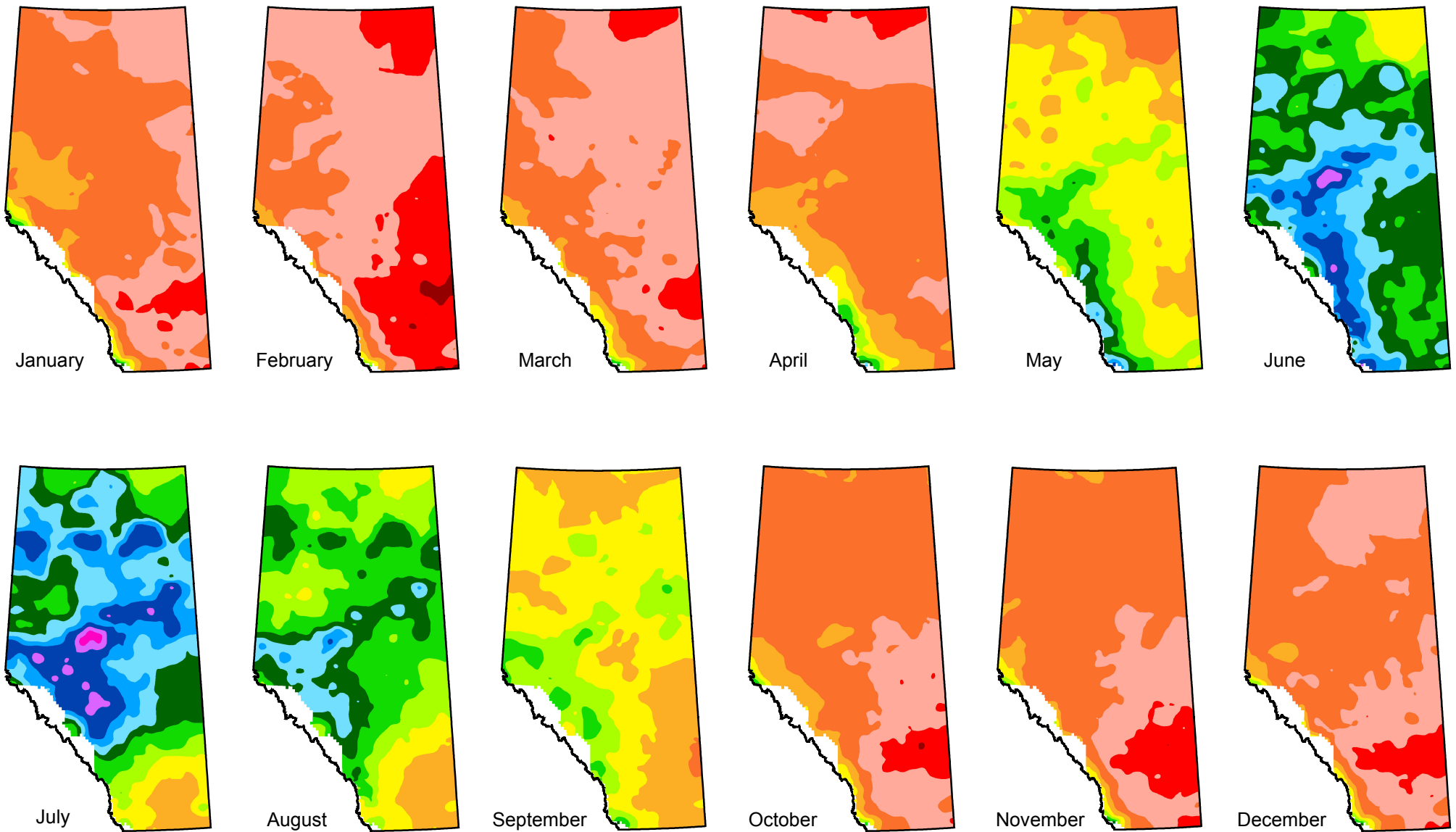
## Map 2



Visit [weatherdata.ca](http://weatherdata.ca) for additional maps and meteorological data







## Average Monthly Precipitation in Alberta

for the period 1961-2010

Average based on historical weather data from the 1961-2010 period, interpolated to township centers using AbClim-3.1.

Compiled by Alberta Agriculture and Rural Development, Environmental Stewardship Division, Technology and Innovation Branch  
Created on December 09, 2011

### Precipitation (mm)

