

# Agricultural Moisture Situation Update

## June 27, 2024

### Synopsis

As of writing this update (June 27, 2024), a low-pressure system is currently set to bring widespread rain to many areas of the province. As of 11 am this morning, much of the extreme southern Peace Region has received over 20 mm of rain, ranging as high as 40 mm in a few locations (**Map 1**). Similarly, the eastern parts of the Central Region and the southeastern parts of the Southern Region have seen well over 5 mm. This current system is expected to bring further moisture to the driest areas of the province (lands west of Grand Prairie, the North West Region and a large area lying west of Red Deer). **Note: this rain is not included in the remainder of the maps presented and discussed here.**

Since the last report (June 19, 2024), precipitation has been variable, with most of it arriving in the form of thunderstorm activity. As a result, across some areas the spatial variability on **Map 2** is quite “hit and miss”. Many lands throughout the Peace Region received 10 to 50 mm, with some parts of the east-central Peace Region receiving well over 50 mm. Elsewhere conditions are much more variable with drier conditions (< 1mm of rain) prevailing through the central parts of the North West Region, the western and southeastern portions of the Central Region and throughout much of the Southern Region.

Currently lands west of Red Deer are extremely dry and have seen little moisture in recent months. This does appear to be changing today as the rain develops and it is expected that about 50 mm will fall across a relatively large area west of Red Deer, and lesser but significant amounts across the dry portions of the North West Region. Let’s hope this bears out by the time this system moves off on Friday.

### Recent Precipitation Trends

Recent 30-day trends in precipitation patterns have been at least near normal across most of the Peace Region with well above normal rain falling across most of the Central Peace Region, with a few pockets of once in 50-year highs both east and west of the town of Peace River (**Map 3**). This, coupled with the rains received so far during the first 11-hrs of Thursday, June 27<sup>th</sup> (**Map 1**), has put all lack of moisture concerns aside. In fact, much of the Central Peace Region has received well over 120 mm, ranging to over 150 mm in the east, leaving some areas too wet and this is likely, at the very least, hampering field activities (**Map 4**).

Notably a marked drying trend has dominated the weather of late across most of the land in the province, lying roughly south of the Yellowhead Highway (**Map 3**). Very dry areas can be found west of Red Deer and southwest of Lethbridge, where pockets of once in 50-year lows are emerging. Today’s rain, which will taper off tomorrow and perhaps return to some areas next week, is likely to improve conditions across most of the province’s growing areas.

Overall, for this growing season, many areas have received at least adequate moisture (**Map 5**), with the exception of a large dry area west of Red Deer, currently at once in 50-year lows, along with parts of the North West Region at once in 12- to 25-year lows, and also the extreme southwest corner of the Southern Region (once in 6- to 12-year lows). Lands southwest of Red Deer have received less than 80 mm since April 1<sup>st</sup> (**Map 6**), which is nearly 100 mm below the 1991-2020 average of 175 mm. Similarly, a pocket west of Grand Prairie has received less than 80 mm, which is about 50 mm below normal. In sharp contrast, parts of the Central Peace Region are very wet with some stations reporting well over 280 mm since April 1, 2024. This is well over the 120 mm which is considered average for this timeframe.

### Recent Temperature Trends

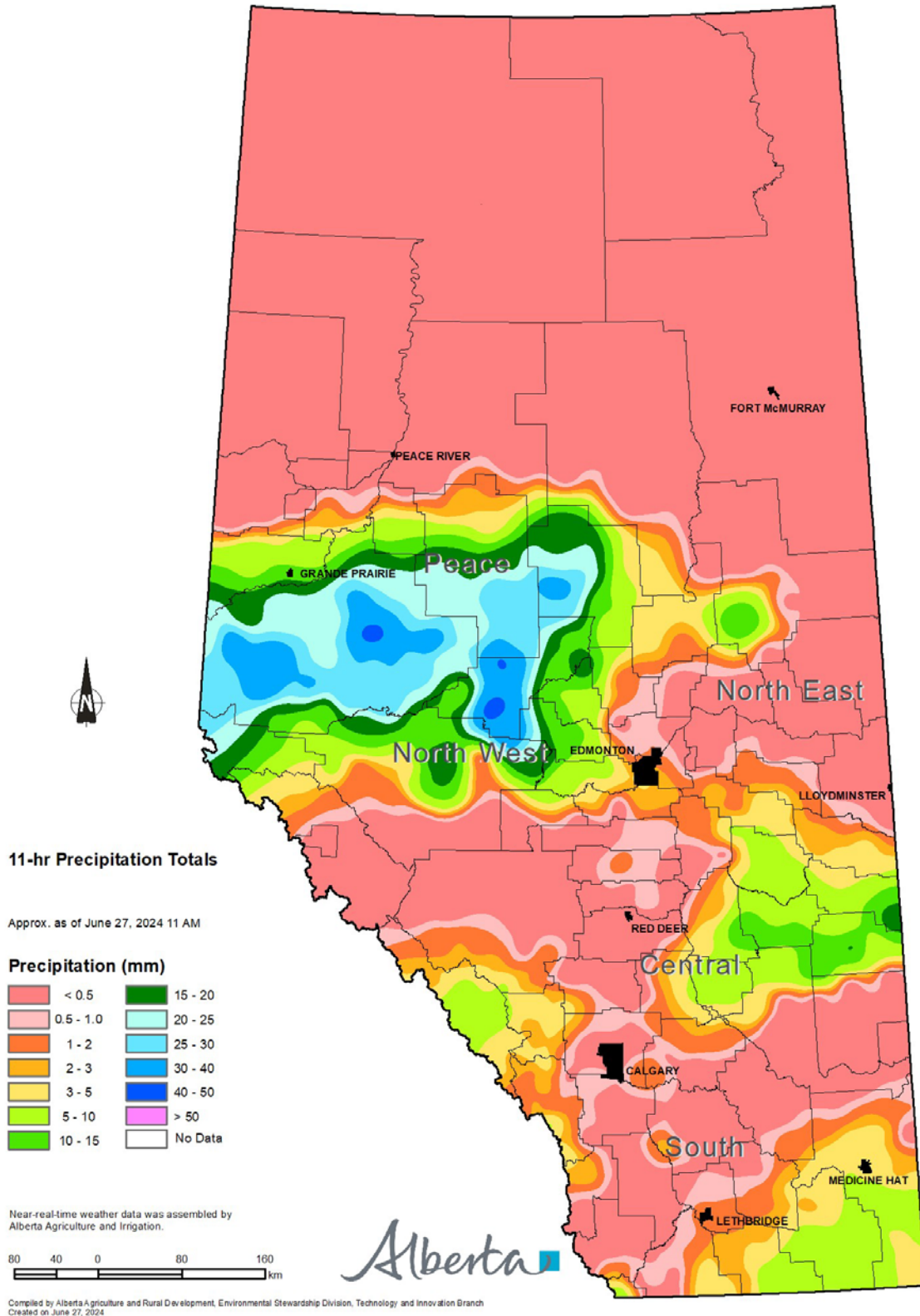
The growing season of 2024 started off cool and temperatures have remained well below normal over the past 60 days (**Map 7**), with many areas seeing a May and June this cold less than once in 6 to 12 years. This has slowed crop development and more heat is needed. The cooling trend deepened in June, with pockets of frost and near freezing temperatures appearing last week (**Map 8**). Cool temperatures at this time of year are significant, as all crops are now actively growing and in need of both moisture and warm weather to mature quickly. Over the last 30 days, most of the agricultural areas have been well below one in 6-year lows with many areas trending in the 12- to 25-year low category (**Map 9**). More heat will be needed moving forward.

### Perspective

For the dry areas of the southwestern Peace Region and through much of the North West and western portions of the Central Region, this rain, should it fully materialize as forecast, could be just what was needed to give crops a boost.

July typically marks a return to hot and dry weather across the south and this should help bring more heat for the crops. However, at least near normal rains will be needed here to help maximize the yield potential of many promising crops. Elsewhere, July is historically the wettest month of the year (**Map 10**), which bodes well for many of the dryer areas that have seen less than adequate moisture so far this season. In contrast, for the soggy areas of the central Peace Region, the prospect of near normal July rainfall may not be needed at this time and a few weeks of warm dry weather would be welcome.

# Map 1



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

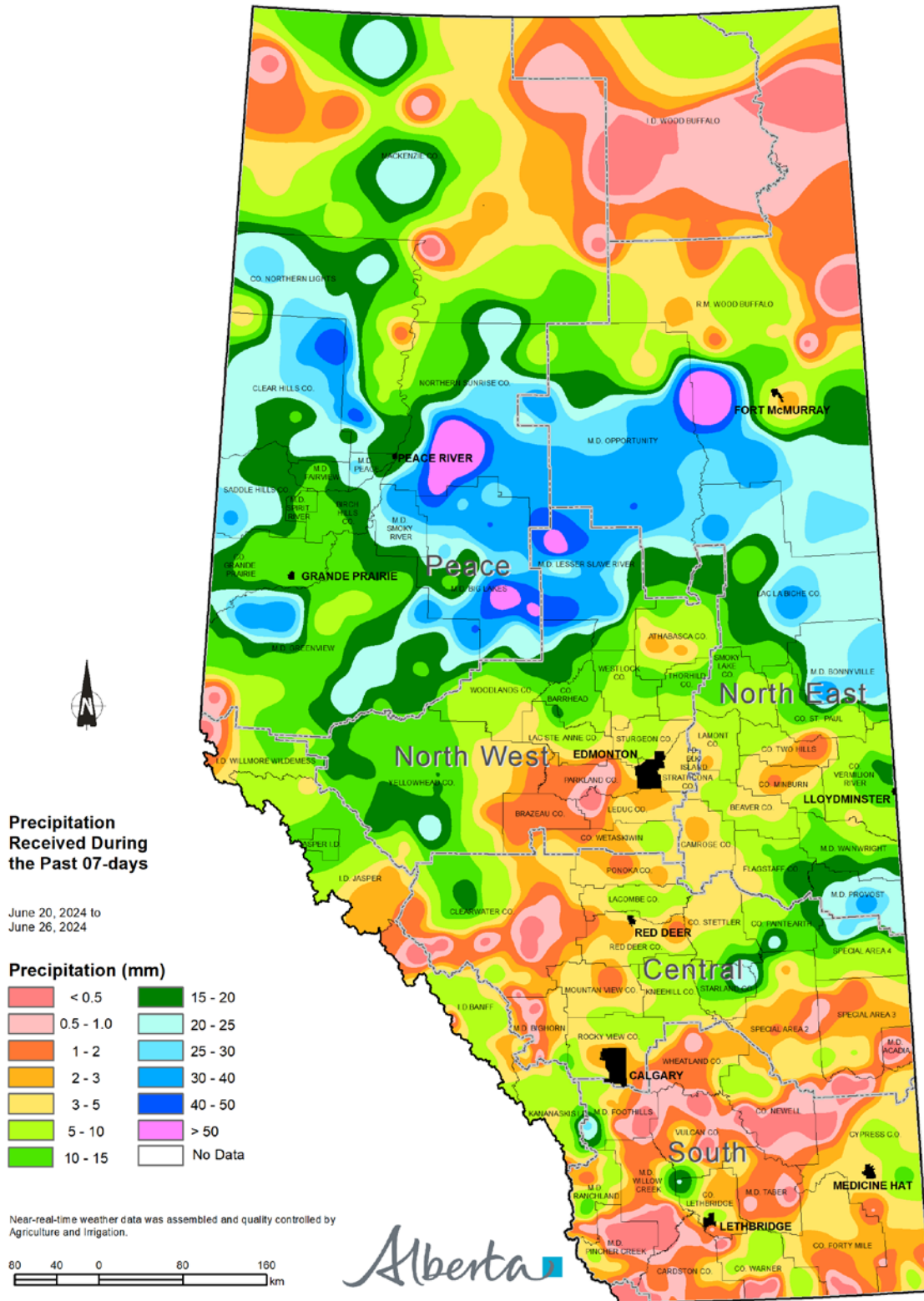
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# Map 2



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

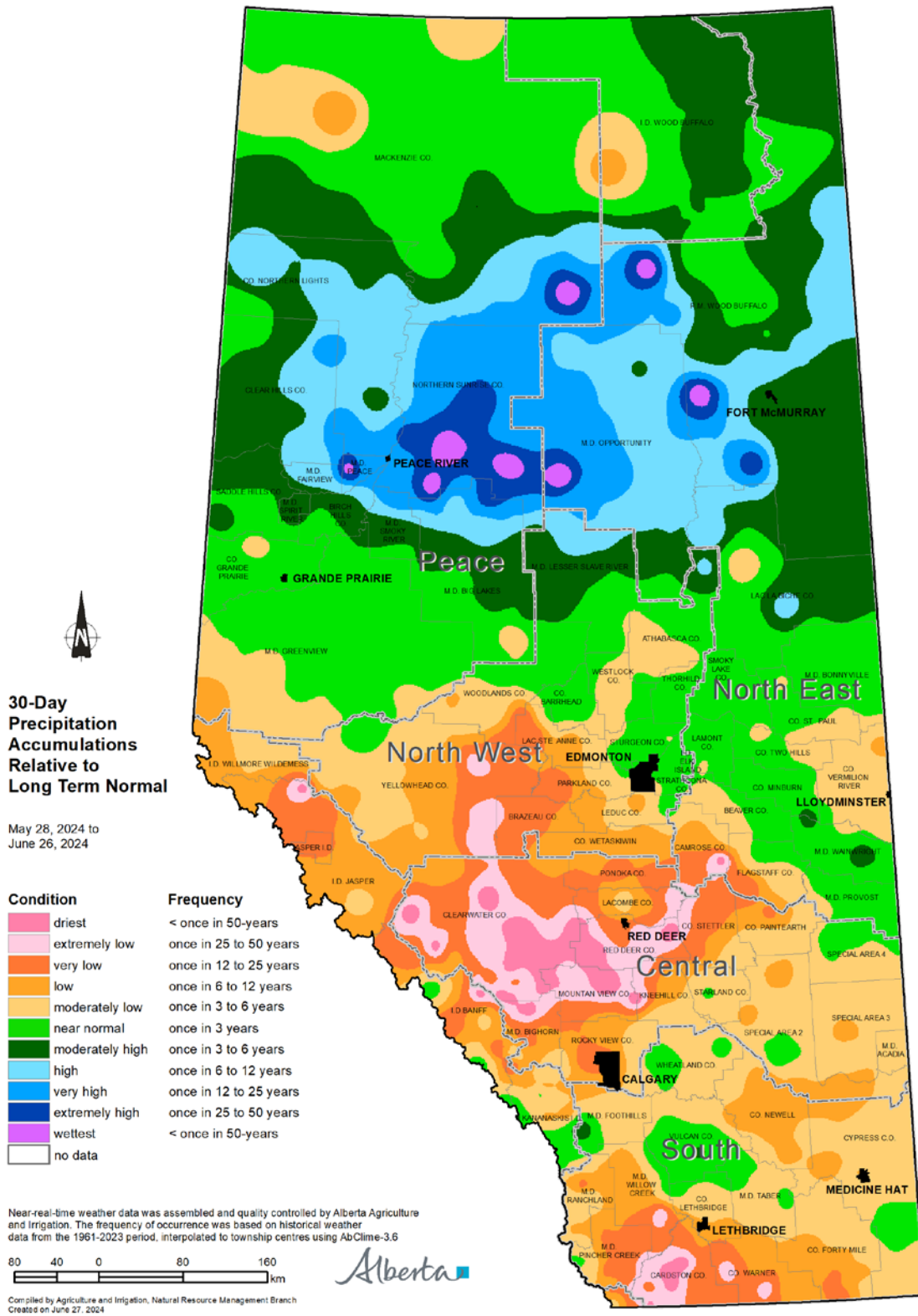
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# Map 3



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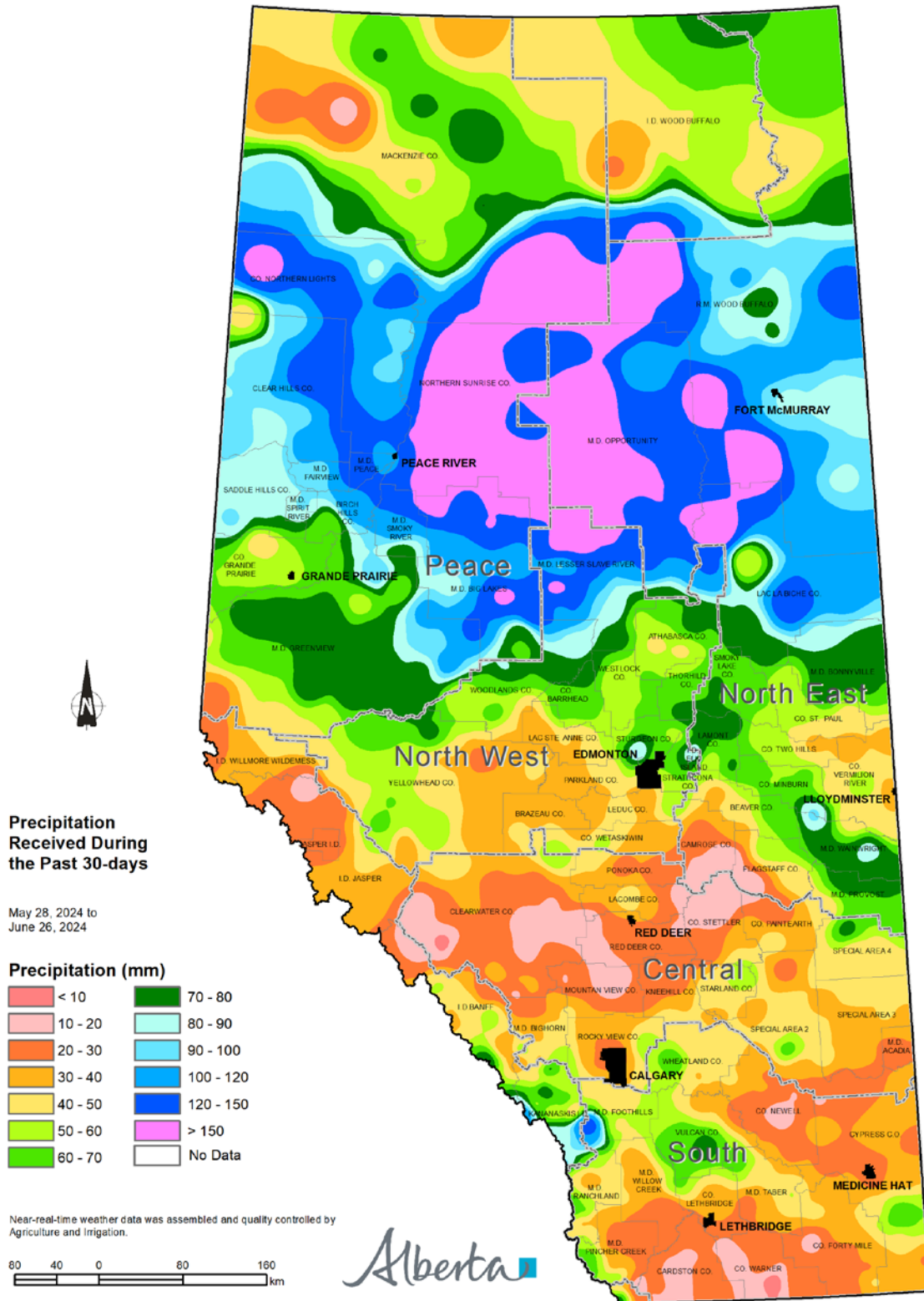
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# Map 4



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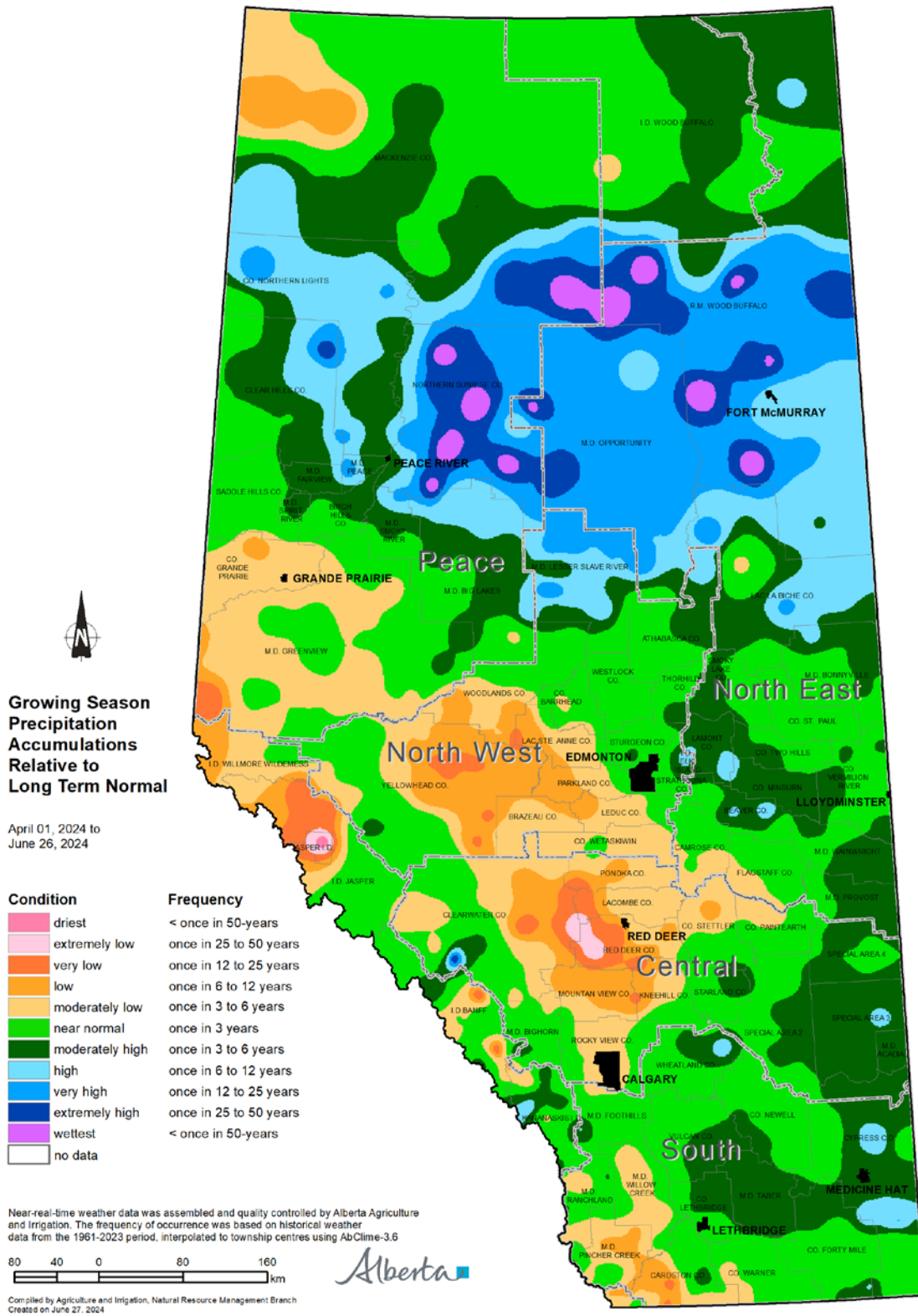
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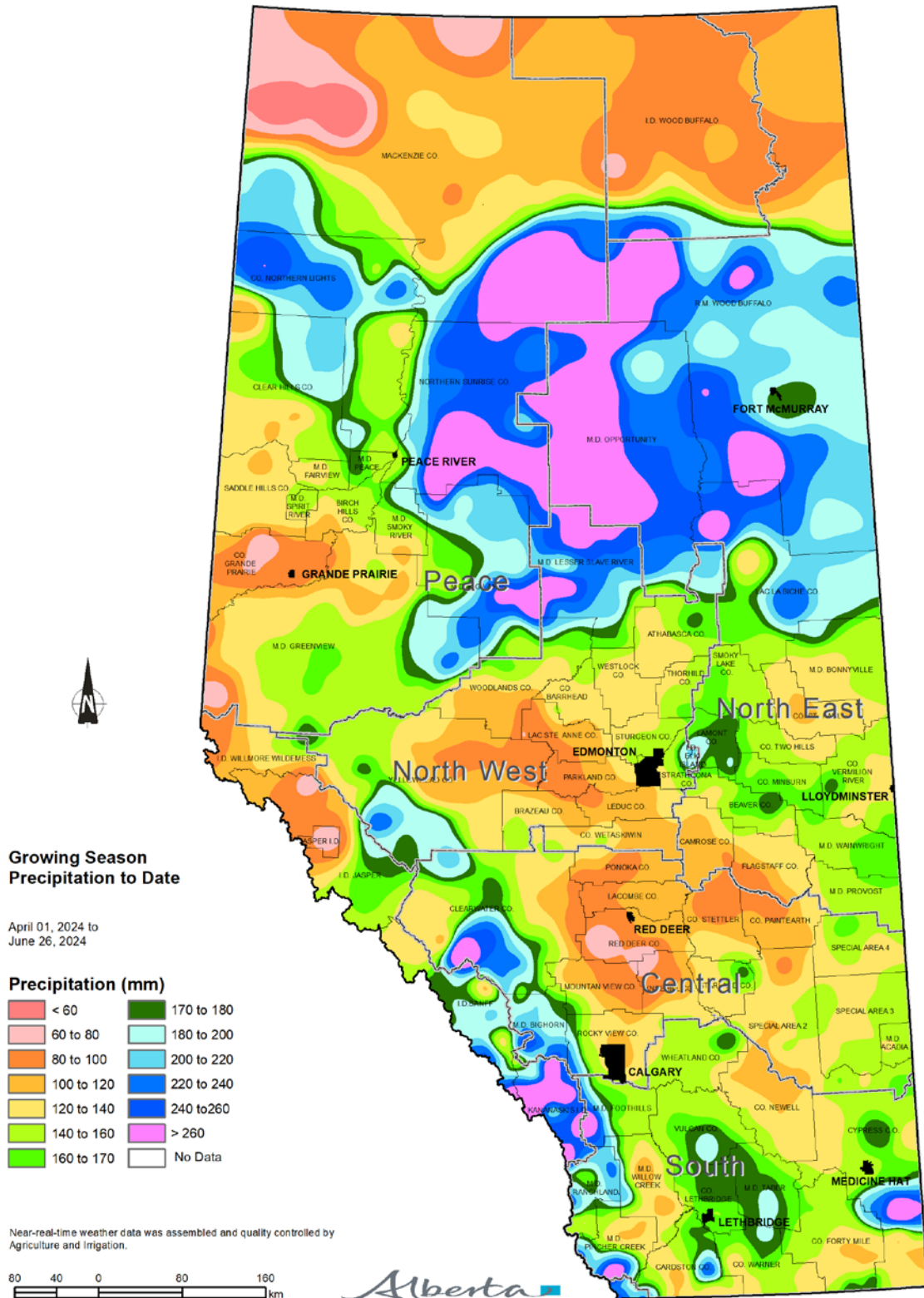


# Map 5



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

# Map 6



Compiled by Alberta Agriculture and Irrigation, Natural Resource Management Branch  
 Created on June 27, 2024

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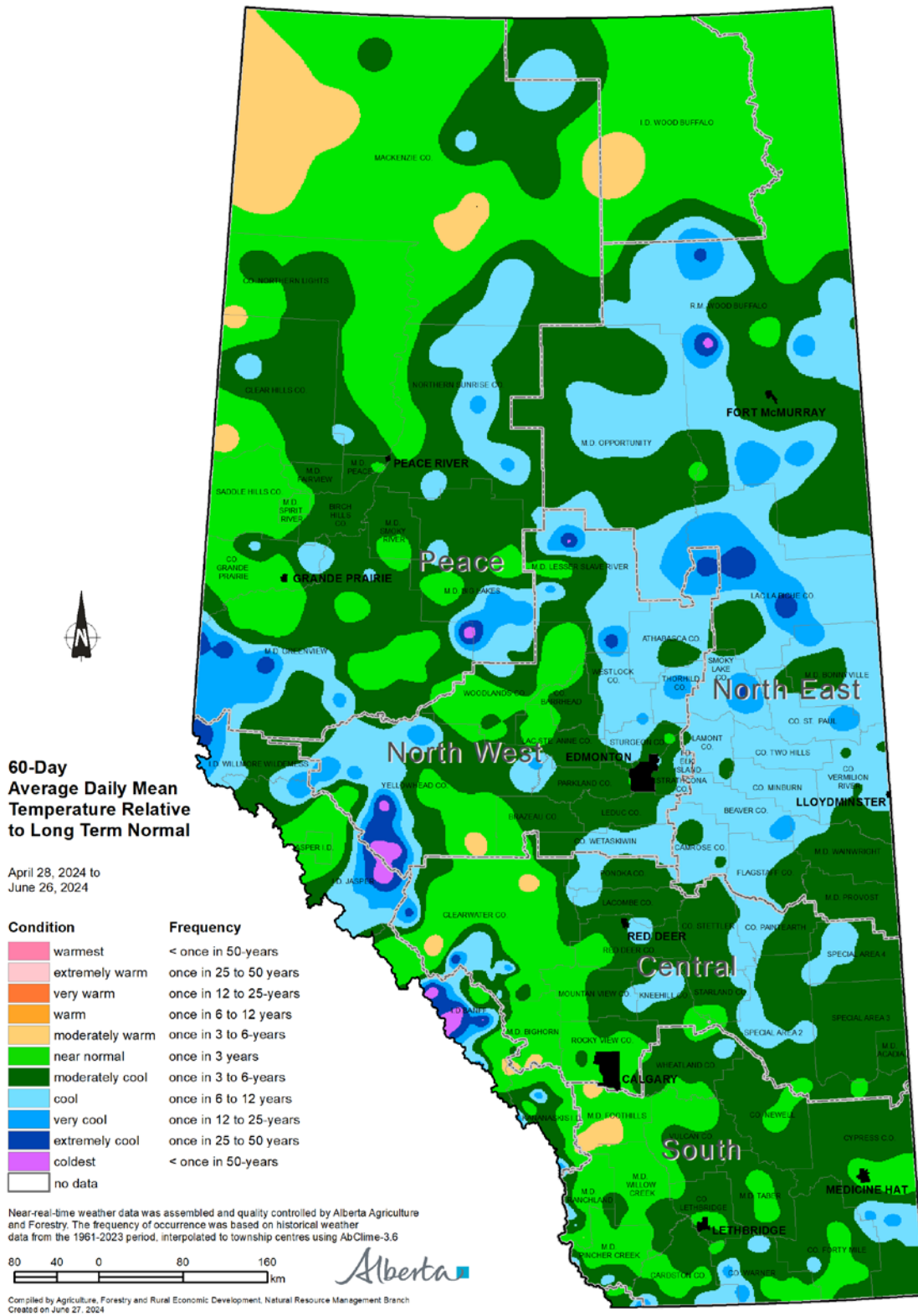
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# Map 7



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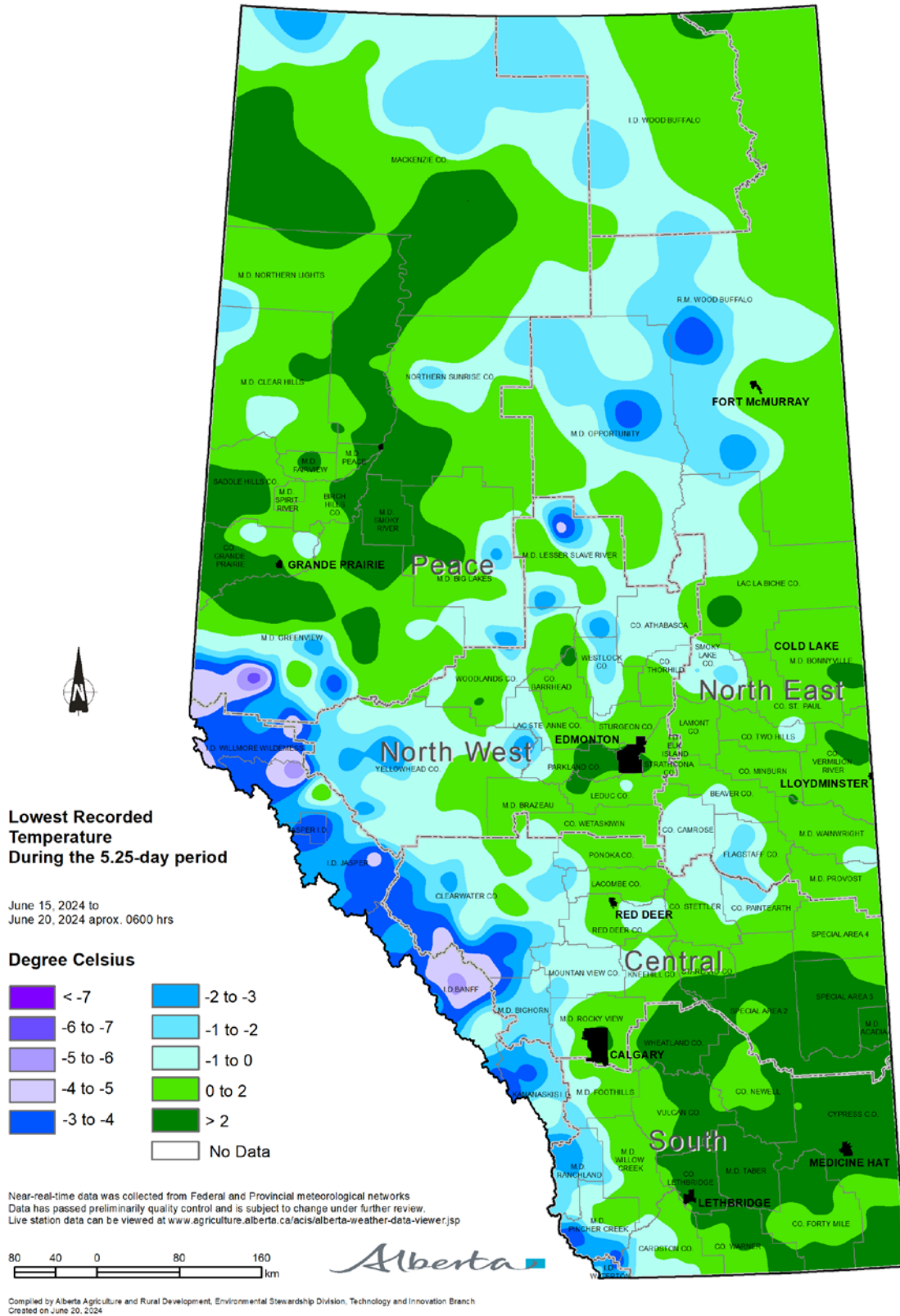
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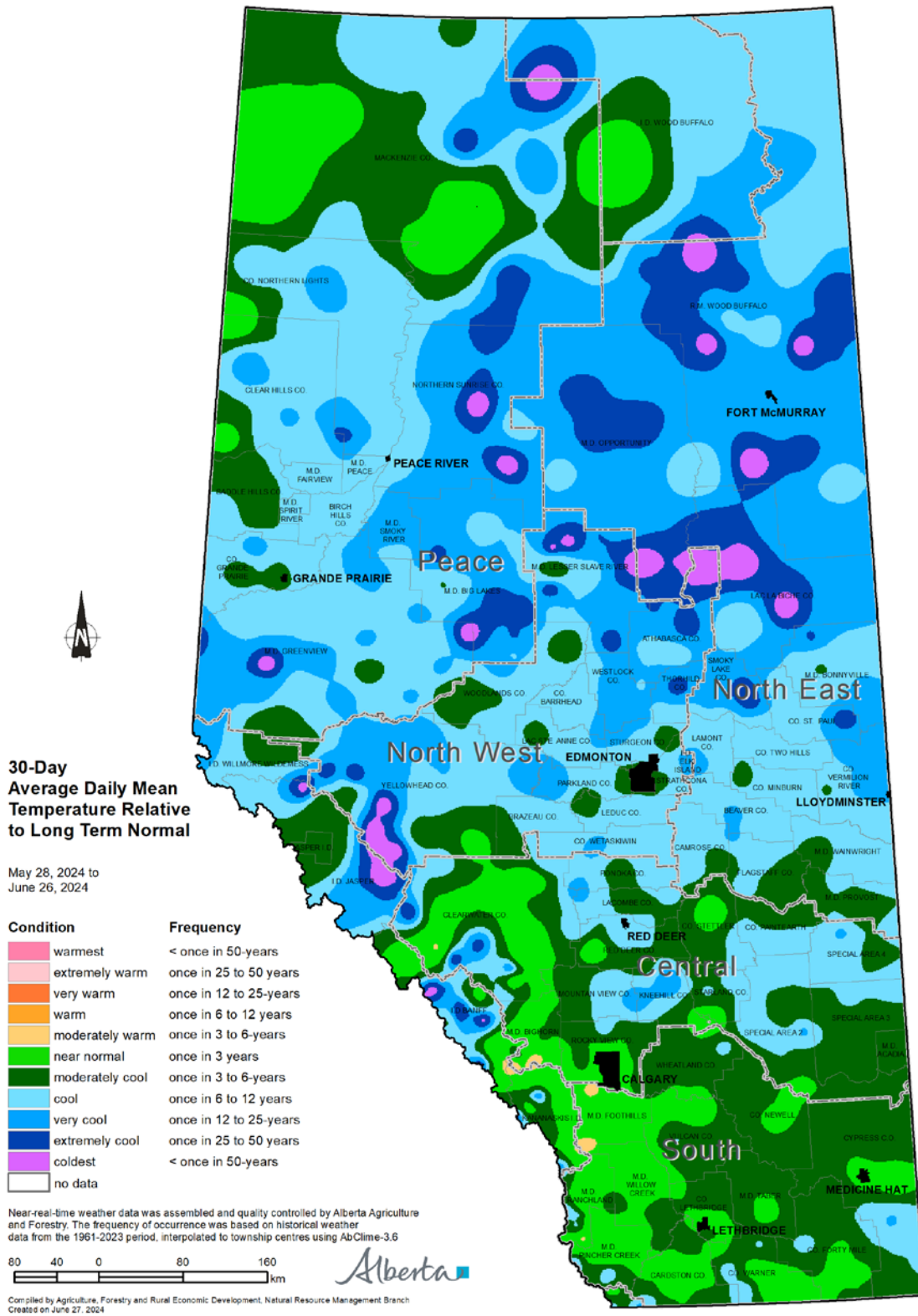
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# Map 8



# Map 9



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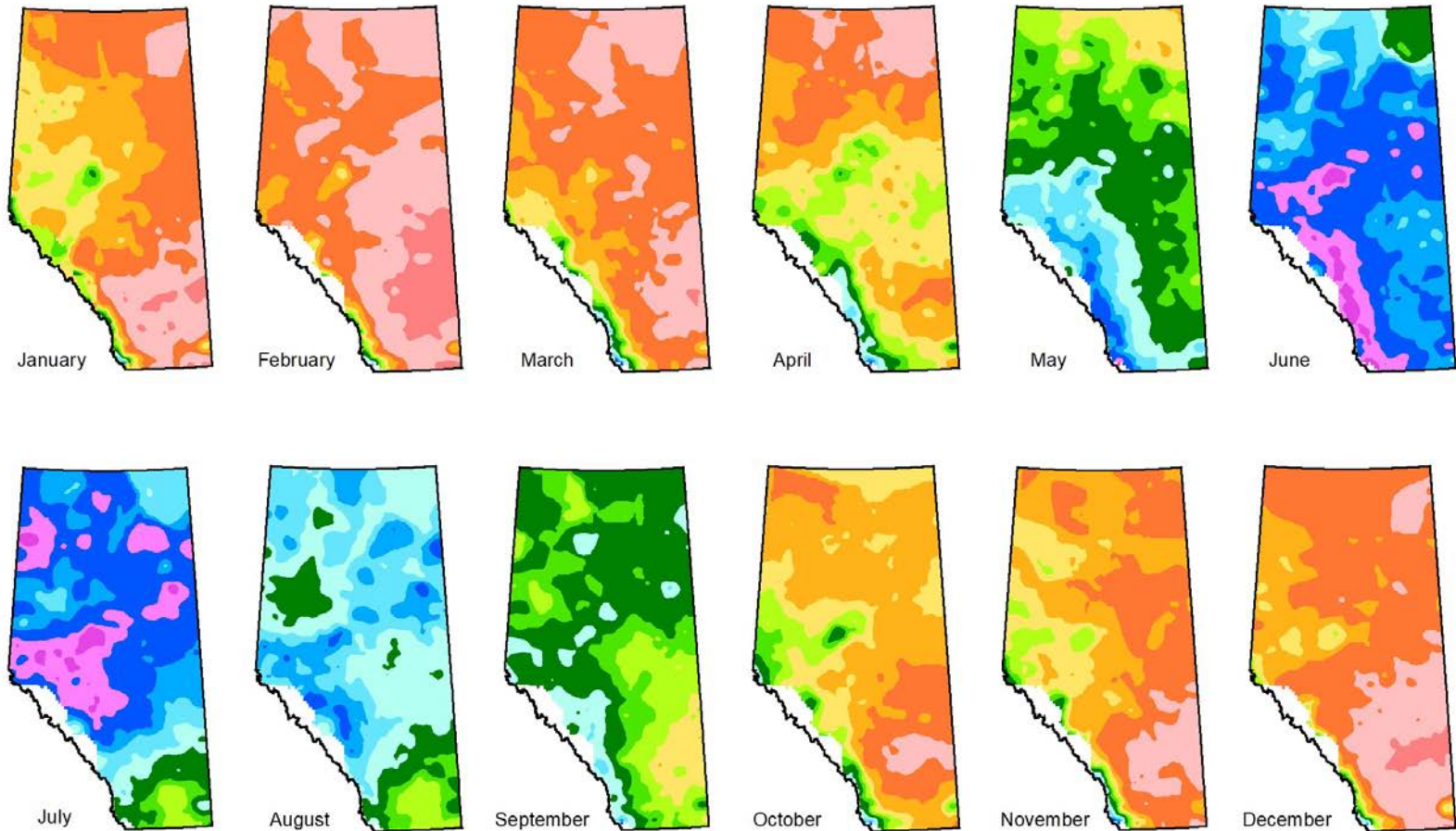
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# Map 10



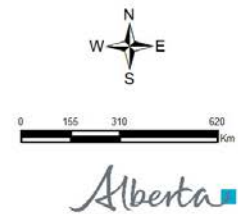
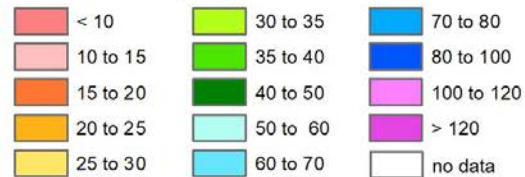
## Normal Monthly Precipitation Accumulations

1991-2020

Weather data was assembled and quality controlled by Agriculture Forestry and Rural Economic Development then interpolated to township centres using AbClima-3.6

Compiled by Agriculture, Forestry and Rural Economic Development, Natural Resource Management Branch  
Created on March 29, 2022

### Precipitation (mm)



<https://open.alberta.ca/publications/moisture-situation-update>

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