

Agricultural Moisture Situation Update

June 7, 2022

Synopsis

Since the last report (May 31, 2022), the weather has been extremely active. Between May 31st and June 2nd, wide spread frosts affected many lands across the provinces growing areas (**Map 1**). A few days later, a major storm system brought significant and much needed rains across many of the drought stricken southern portions of the Province.

This system was accompanied by some localized damaging thunderstorms. **Photo 1** shows the aftermath of heavy rains which pounded an area 75 km west of Brooks, near Lomond, delivering an unverified 175 mm of rain mixed with hail (**Photo 1**, courtesy of Jason Schneider). Note that this system eluded all weather stations in the area and was not captured on the maps presented here.

Precipitation over the past 7-days

Many parts of southern Alberta received much needed rain over the weekend and into Monday (**Map 2**). Recorded rainfall totals ranged from 40 to 70 mm across a wide area from Rocky Mountain House, down to the Cypress Hills. The greatest amounts were measured at the Limestone Mountain (113.1 mm) and Clear Water Auto stations (94.6 mm), both located in the high country west of Sundre.

Unfortunately, the extreme southwestern parts of the Southern Region, only received 5 to 10 mm of moisture (**Map 2**). While this is enough to give crops a temporary boost, more will be needed here very soon. Large parts of the eastern-half of the province, from the MD of Acadia and north along a diagonal line up to the town of Peace River and beyond received 0 to 5 mm of rain. For the north central parts of the Peace Region that are struggling with excess moisture this was good fortune. However a lack of recent moisture through the North East Region and eastern portions of the Central Region are beginning to be of concern.

Growing season precipitation as of June 7 2022

Considerable moisture deficits still exist across the extreme south-western portions of the Southern Region, the Special Areas and through parts of the North East. The recent rains

(**Map 2**) complicate the interpretation of **Map 3**. However suffice it to say, most of the dry areas depicted on **Map 3** will benefit from further rains soon.

Since April 1, many widely scattered areas of the Province have received less than 40 mm of moisture (**Map 4**). These lands currently have little capacity to resist short term dry spells and rain is needed now.

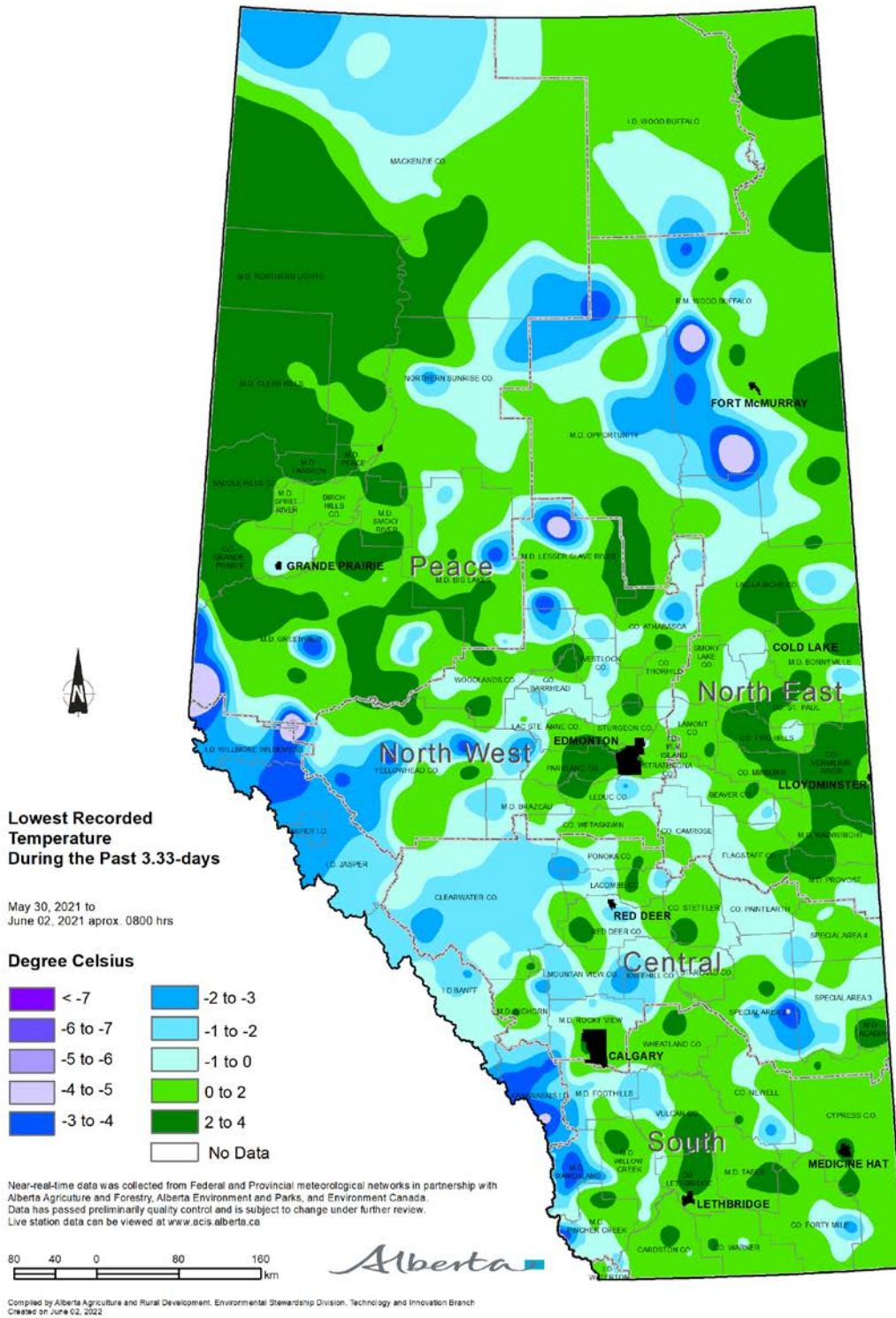
Soil Moisture Reserves Relative to Normal

Throughout most of the province's agricultural areas that lie south of the Swan Hills, soil moisture reserves are well below normal for this time of year (**Map 5**). Lingering pockets of one in 50-year lows exist through the Bonneville area, along with parts of Yellowhead County and the Special Areas, with a few stations recording less than 30 mm since April 1 (**Map 4**).

Perspective

As crops begin to grow moisture demand will increase. As a general rule, at their peak crops need about 25 mm of water per week for optimum growth along with warm temperatures to speed maturity ahead of fall frosts. With low soil moisture reserves lingering across many areas, well timed, near normal moisture will be needed over the coming weeks. However it's only early June and weather patterns currently appear favorable for moisture, albeit with temperatures remaining on the cool side of normal. As such, there is yet plenty of time to receive adequate moisture which brings with it the hope of healthy yields this fall.

Map 1



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Photo 1

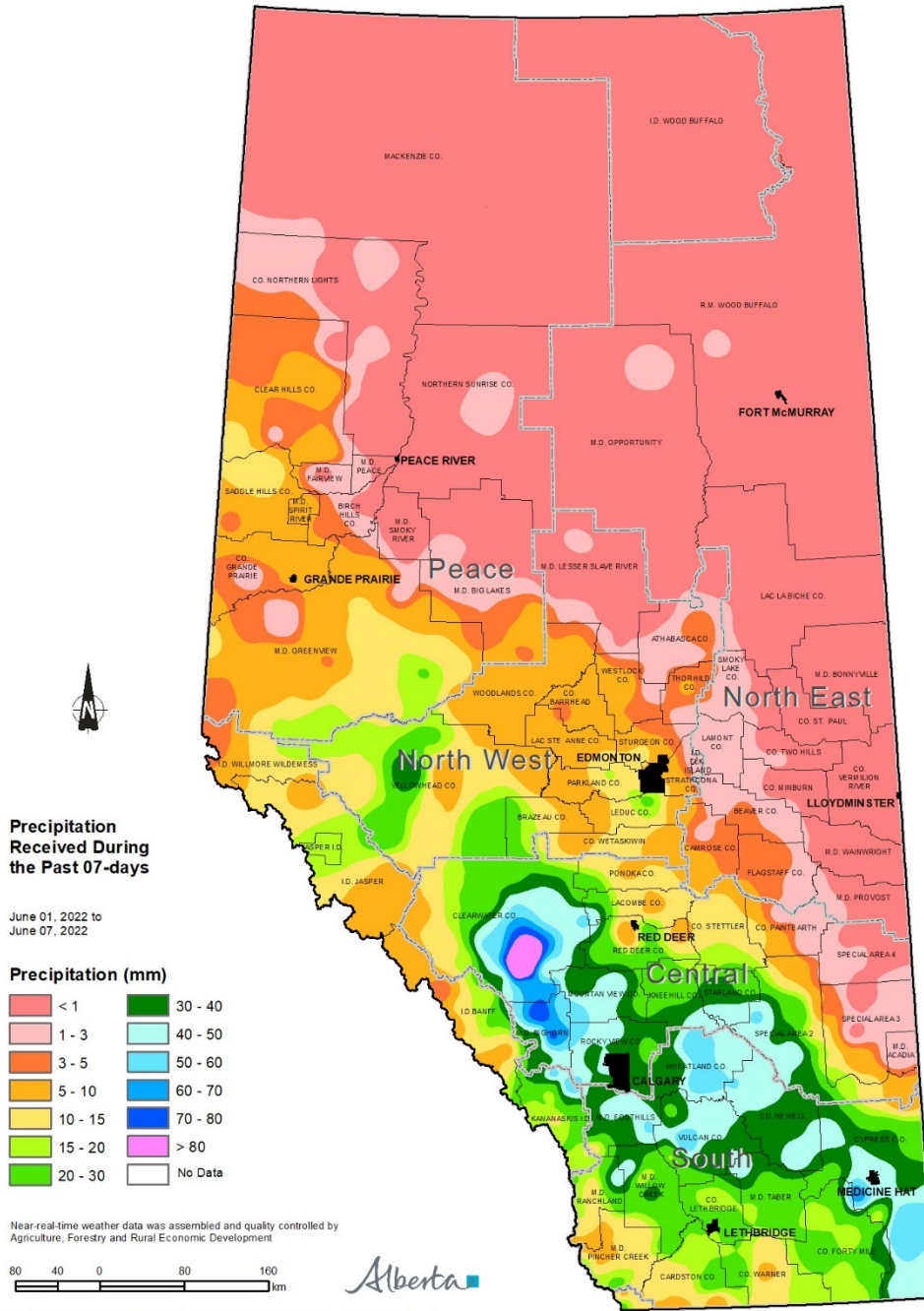


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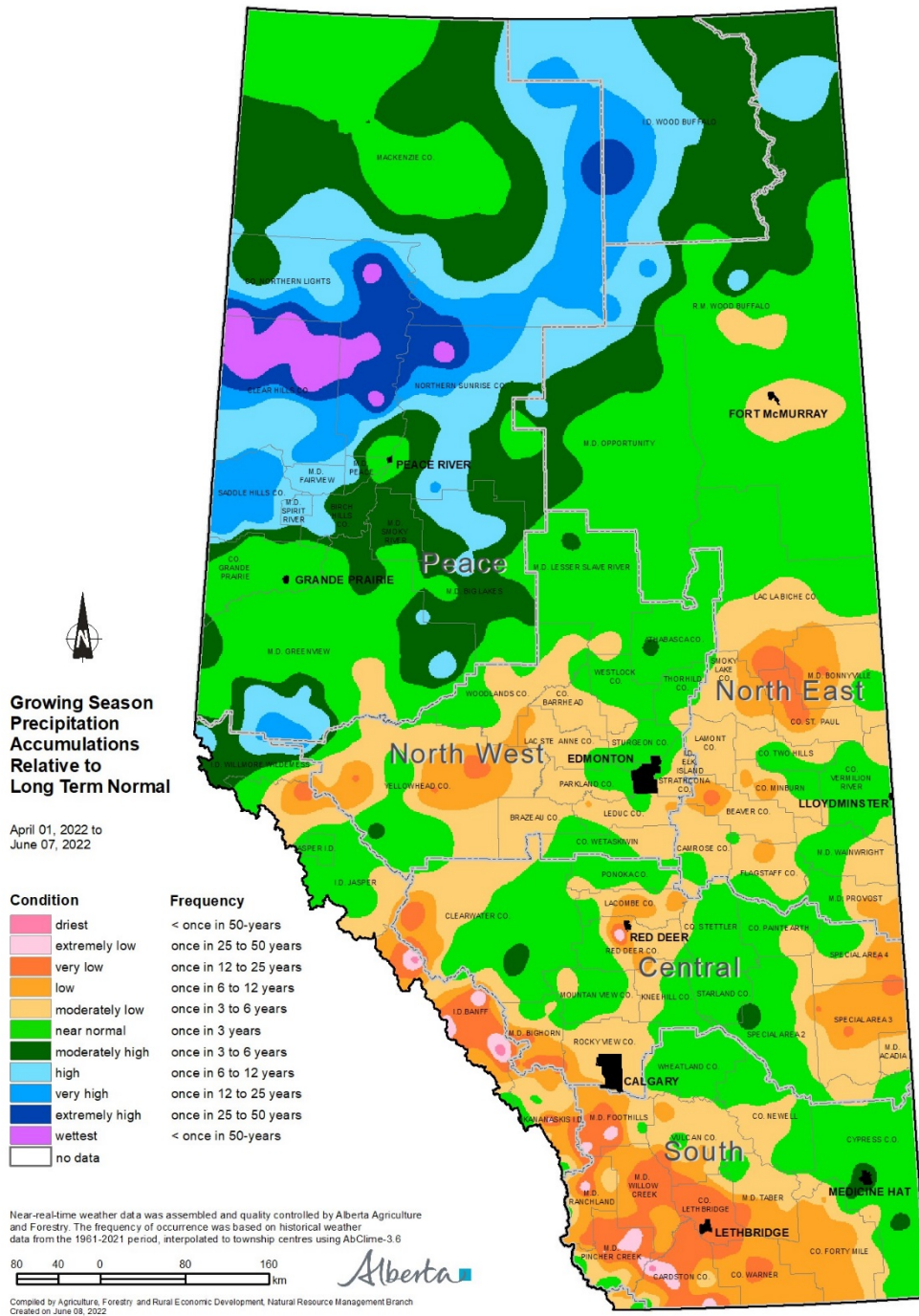


Map 2



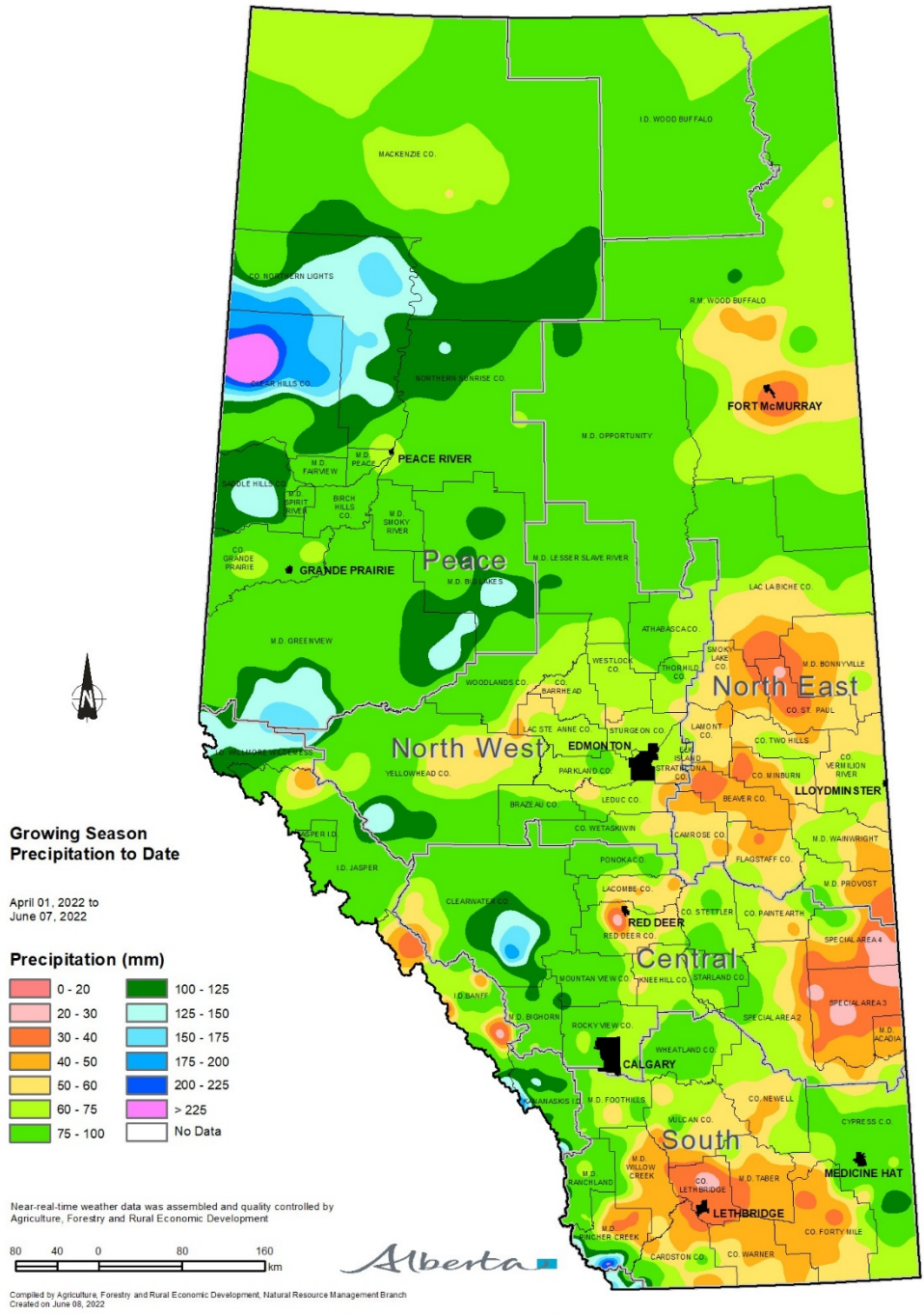
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Map 3



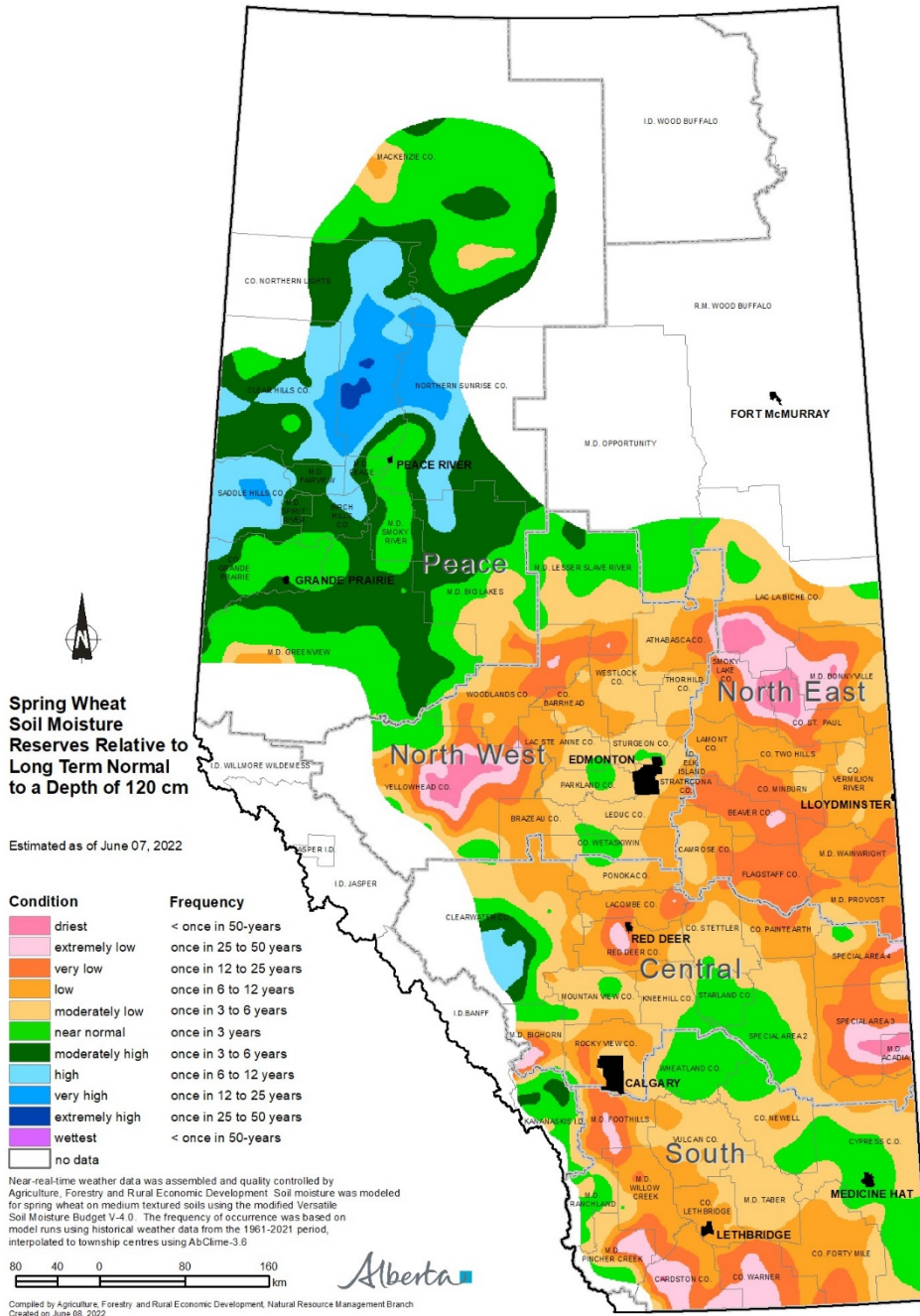
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Map 4



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Map 5



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