

Agricultural Moisture Situation Update

May 31, 2022

Synopsis

Last night several widely scattered areas received a late spring frost (map 1). Many agricultural lands experienced temperatures in the -2C range. One station in Special Area 2 recorded temperatures down to -4.1 C with temperatures remaining below 0C for at least 6 hours. Frost of this magnitude is rare at this time of year; however, in 1969 on June 12th this same area saw overnight lows dip to -5.3C and the following night down to down to -3.4 C.

Note that frost severity shown in **Map 1** may be more or less than depicted for specific fields as cold air is highly fluid on the landscape. It is heavier than warmer air and thus usually tends to collect in low lying areas and seep through local drainage ways.

Since the last report (May 23, 2002) precipitation has been highly variable with some areas in southern Alberta receiving 5-10 mm and many other areas remaining dry (**Map 2**). Wet areas across the north-central Peace Region have continued to receive moisture with a large swath of agricultural land between the towns of Peace River and Fort Vermillion reporting rainfall totals ranging from 15 to 60 mm. Through the forested areas, up to 84.8 mm was recorded at Birch Mountain Auto, north of Fort MacKay and 77.7 mm at Doig Lookout, west of Manning.

Precipitation over the past 180-days

Longer term precipitation trends are well below normal for large areas of the province lying south of Red Deer, and slightly below normal moving north as far as the Yellowhead highway in many locals (**Map 3**). Large areas south of the Red Deer line have received less than 75 mm of moisture since December and some of the hardest hit areas in the Counties of Newell and Vulcan have received less than 40 mm over his same time frame (**Map 4**).

In contrast, much of the north-half of the province has experienced above normal moisture with many agricultural areas of the Peace Region receiving excess moisture, particularly since about the end of April (**Map 5**). In fact, since April 25th the greatest amounts were measured at the Doig lookout station 265.7 mm followed by Notikewin LO 195.8mm and then Keg River AGCM 153.3 mm. This has caused localized flooding in remote settlements, resulting in

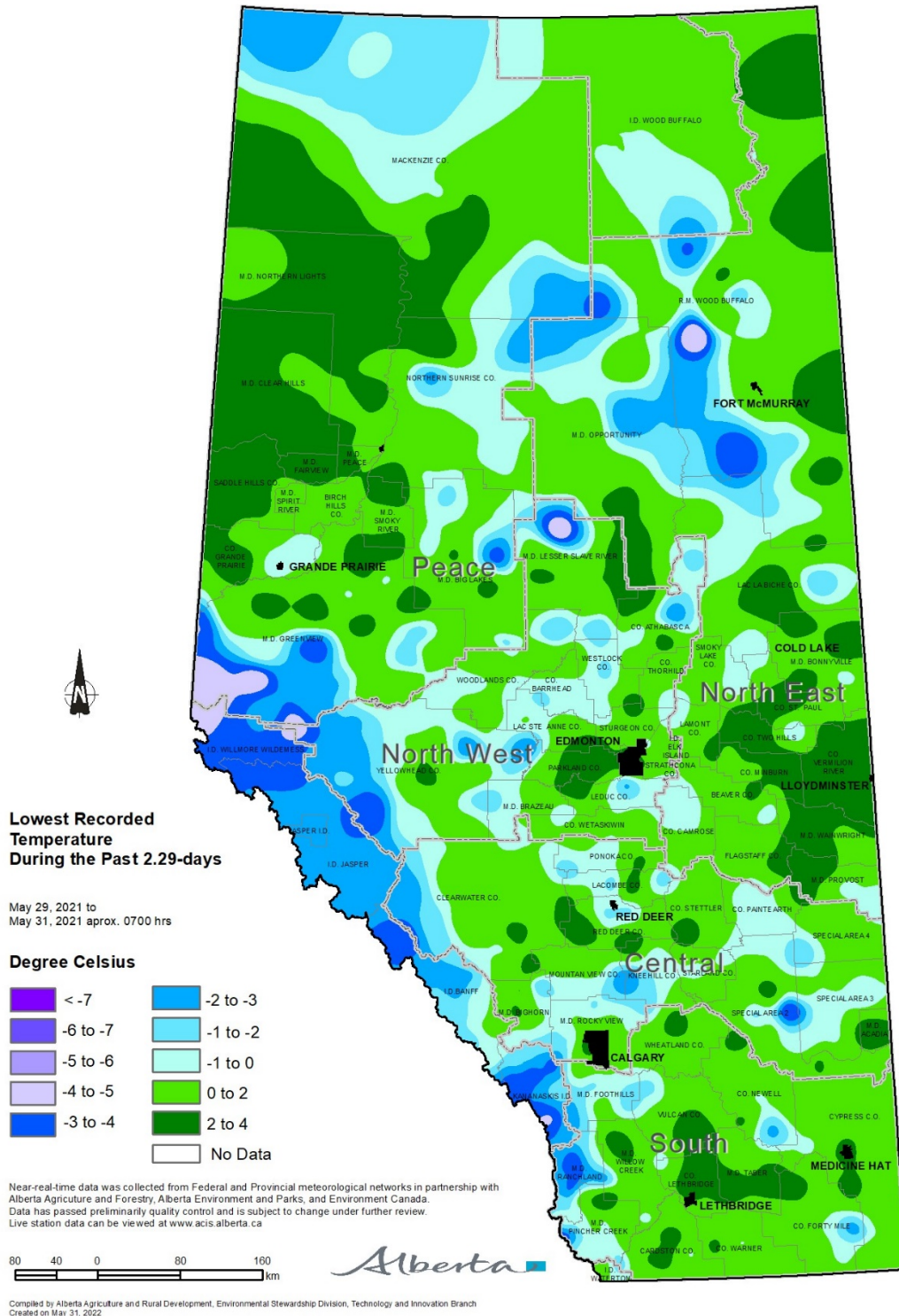
local states of emergency and evacuations, west of Manning.

Perspective

As spring lapses into June and temperatures warm further, most areas, with the exception of the central Peace Region, will need additional moisture very soon. June is typically the wettest month of the year across most of the province and a return to normal weather patterns are needed now. This is even more important for those lands lying between Red Deer and the US border with the greatest moisture shortages lying south of the Trans-Canada highway.

In sharp contrast, parts of the Peace region are experiencing excess moisture and cool weather. While moisture supplies are generally good through the agricultural areas here, warmer temperatures are needed to get the cold out of the ground, evaporate excess moisture and get plants off to a good start.

Map 1

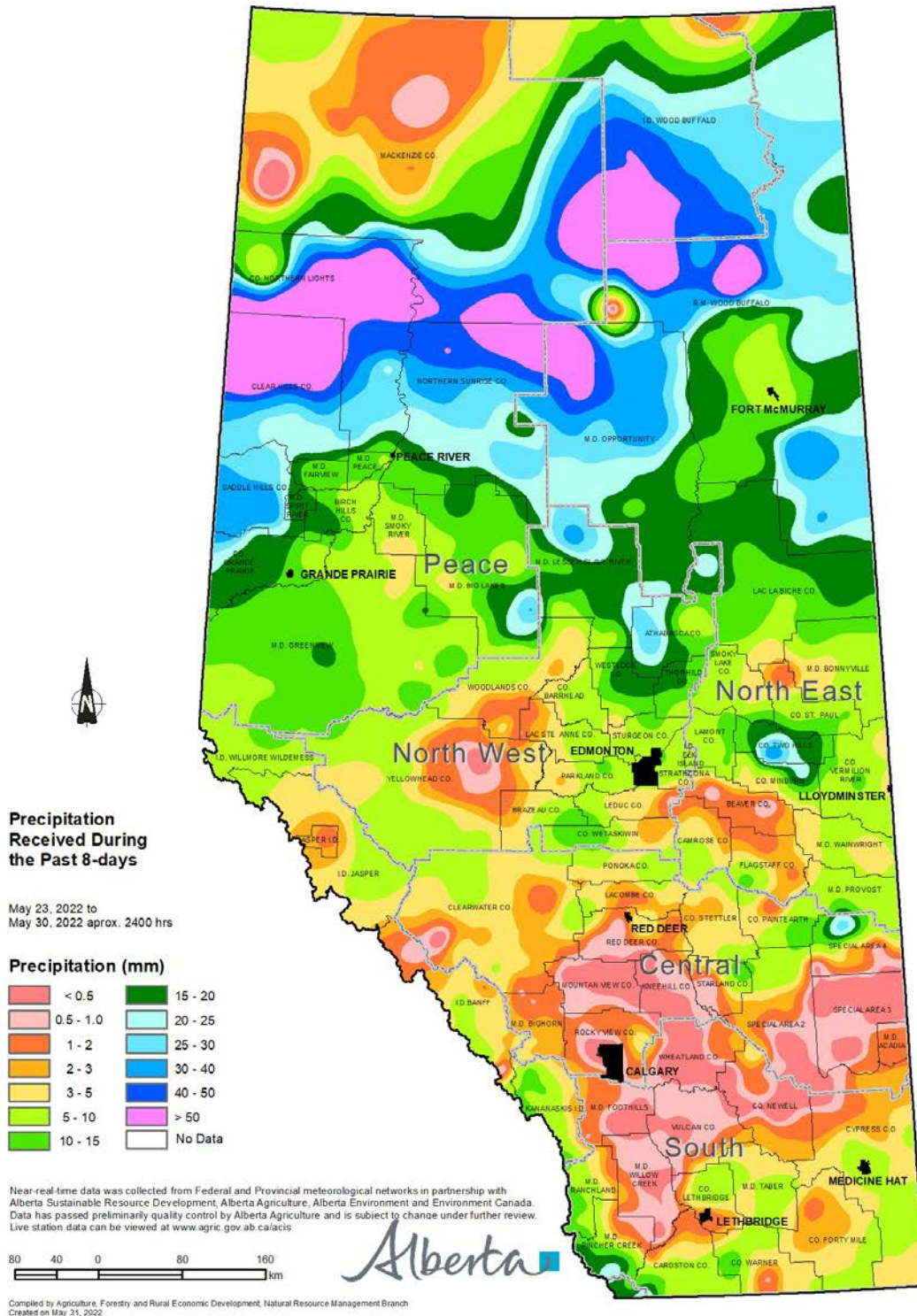


<https://open.alberta.ca/publications/moisture-situation-update>

©2022 Government of Alberta | June 6, 2022 | Agriculture, Forestry and Rural Economic Development



Map 2



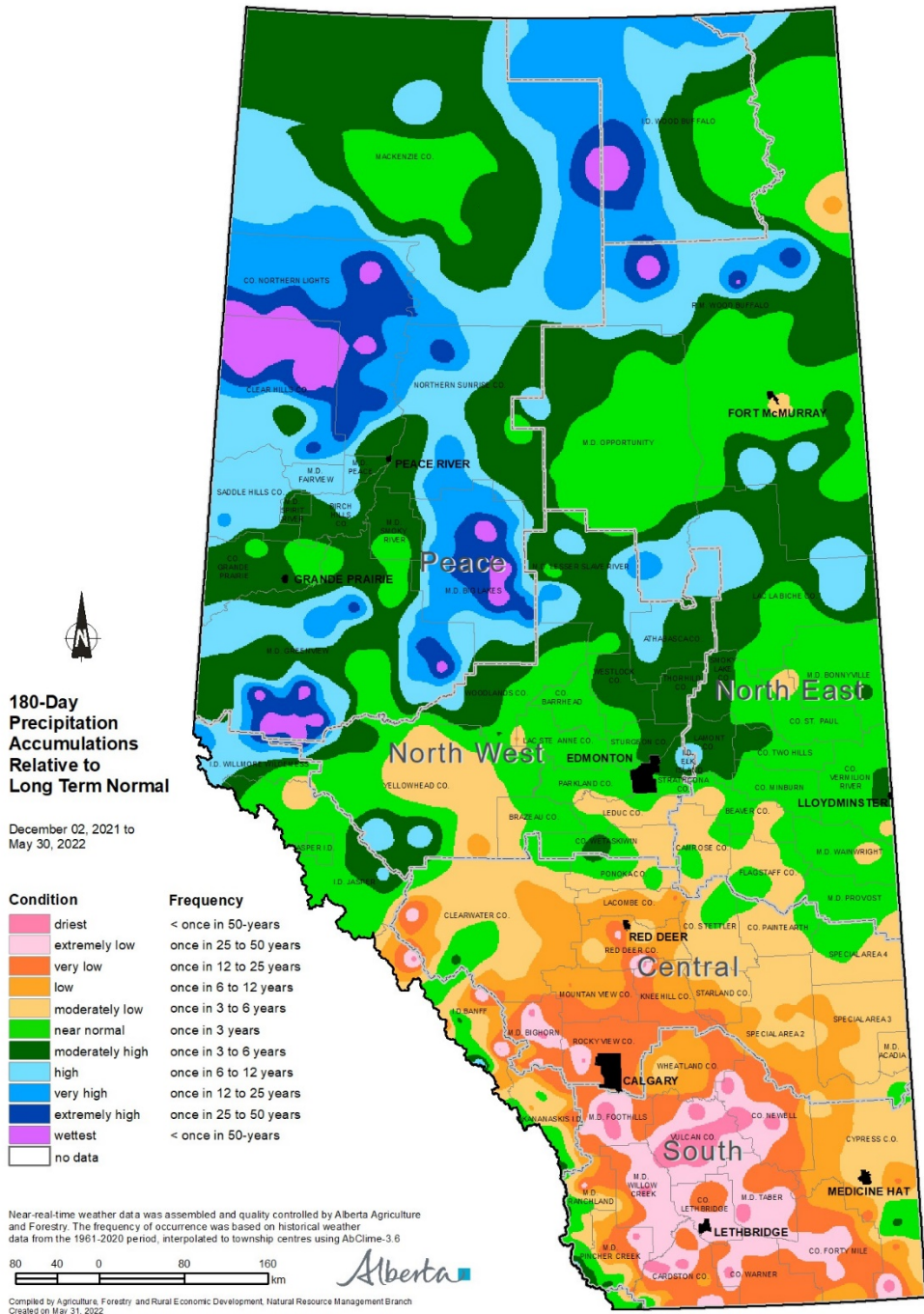
Visit weatherdata.ca for additional maps and meteorological data

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

©2022 Government of Alberta | June 6, 2022 | Agriculture, Forestry and Rural Economic Development

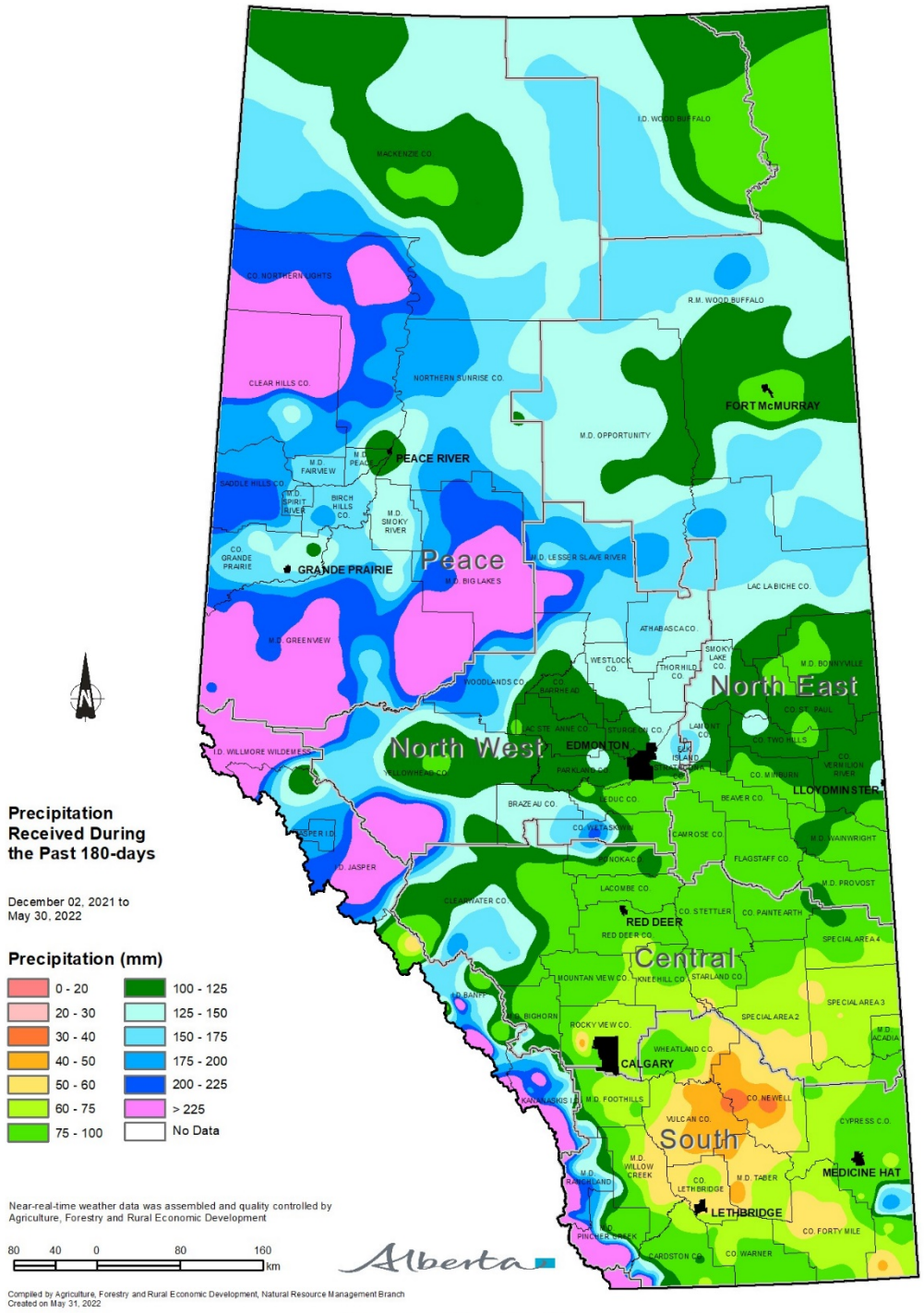


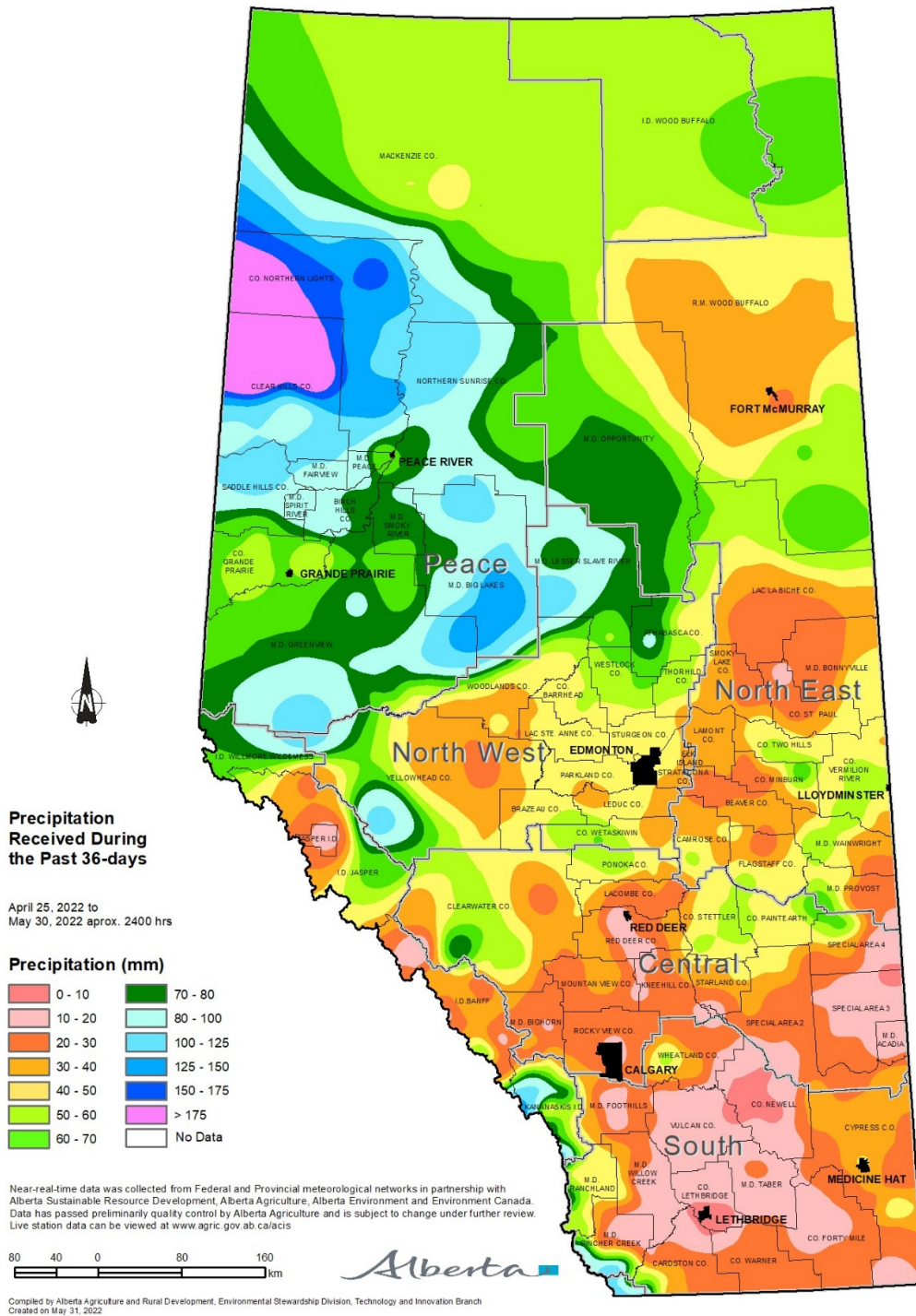
Map 3



Visit weatherdata.ca for additional maps and meteorological data

Map 4





Visit weatherdata.ca for additional maps and meteorological data