

Agricultural Moisture Situation Update

May 10, 2022

Synopsis

Since the last report (April 27, 2022), precipitation has been highly variable, ranging from more than 80 mm through parts of the Peace Region, to less than 1 mm through the extremely dry parts of Southern Alberta (**Map 1**). Many lands across the Peace Region and along the foothills have received late spring snows as winter stubbornly refuses to give way to spring. Warm weather and clear skies are needed across much of the Peace Region to help alleviate planting delays and dry soggy fields.

Generally, areas south of the Swan Hills all the way to the US border, could use some moisture and certainly some warmer weather to help warm soils, speed germination and give pastures the heat units they need to grow.

More than ever, many areas south of the TransCanada Highway need moisture now as those lands that are not irrigated currently face serious moisture shortages.

30-day temperature trends as of May 10 2022

This spring has been colder than normal province wide. Many of the highland areas across the Peace Region see a spring this cold less than once in 50-years (**Map 2**). Across the west-half of the province, many agricultural areas see a spring this cold less than once in 12 to 25 years. This grades to one in 6 to 12 years across much of the east-half of the province.

For those areas that are still suffering from the drought of 2021, cold weather has helped alleviate moisture stress somewhat, by delaying emergence (in the far south) and slowing pasture growth and hence reducing water demand. However for pastures and hay land, this comes at the expense of productivity, at a time when feed supplies are low and prices are exceptionally high.

30-day precipitation patterns as of May 10 2022

In general, most areas north of a line running east/west through Calgary have experienced at least near normal moisture over the past 30-days (**Map 3**). Most of the Peace Region has experienced excessive moisture, lingering snowpacks and cold temperatures. Many lands here have received upwards of 60 mm of rain and snow, with some areas reporting well over 120 mm over the last 30-days.

Localized flooding has been extensive in the Community of Chateh, west of High Level.

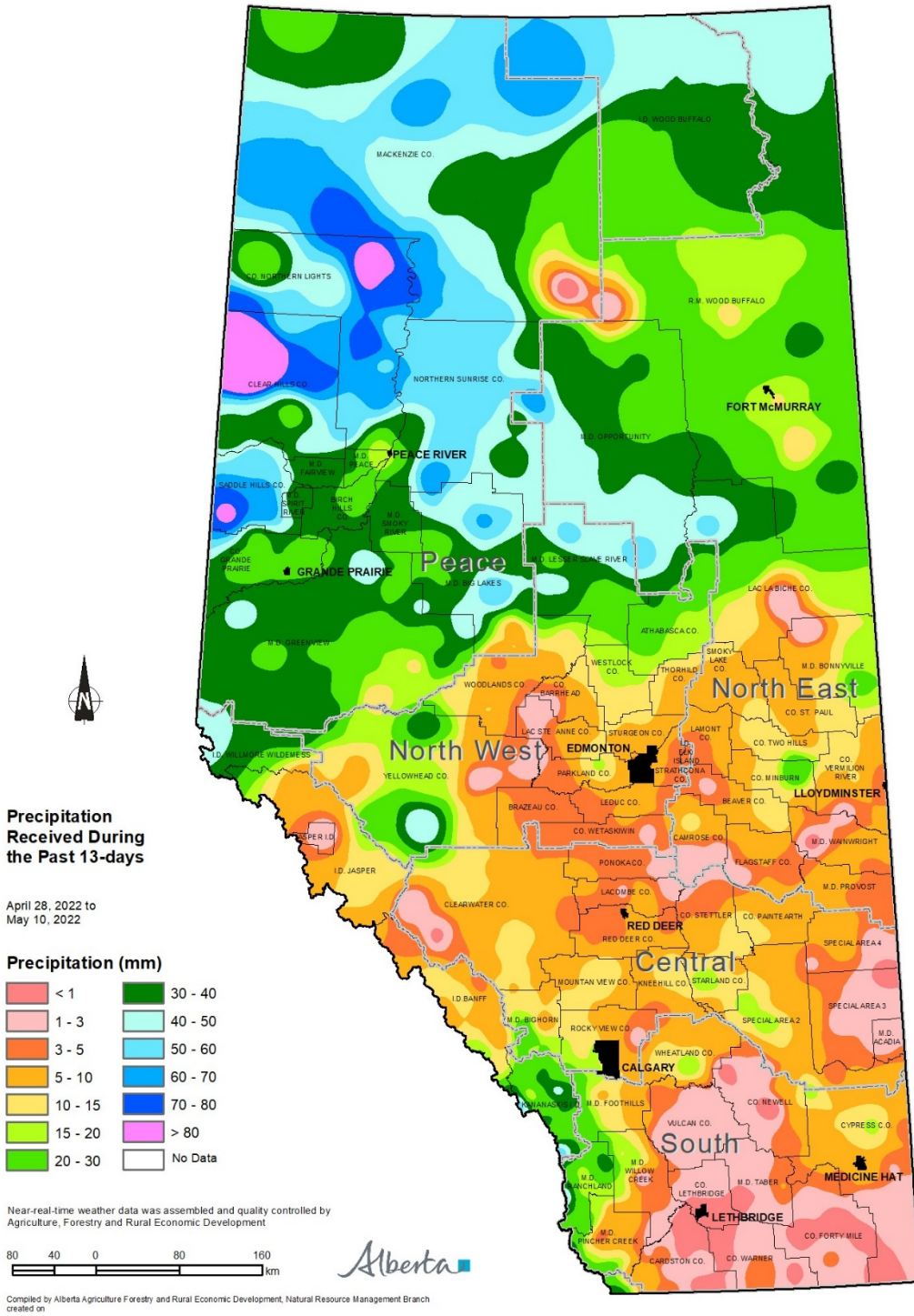
South of the Calgary line, precipitation has continued to remain below normal and moisture is needed immediately with large areas receiving less than 10mm (**Map 4**). In fact, many stations in these areas have reported less than 5 mm in the last 30-days and some have even recorded less than 25 mm over the past 90 days.

Soil Moisture reserves relative to Normal

Soil moisture reserves are approaching one in 50-year highs through many parts of the Peace Region (**Map 5**). Warm dry weather will be needed to help put seeding operations back on track. In stark contrast, most of the rest of the agricultural areas have soil moisture reserves that are well below normal for this time of year and crops will be reliant on timely rains moving forward, or a significant widespread rainfall event of over 50 mm or more to help replenish surface water supplies and soil moisture.

Dry conditions are worsening throughout much of the Southern Region with about 25% of the agricultural lands estimated to have soil moisture reserves this low on average, less than once in 50-years.

Map 1

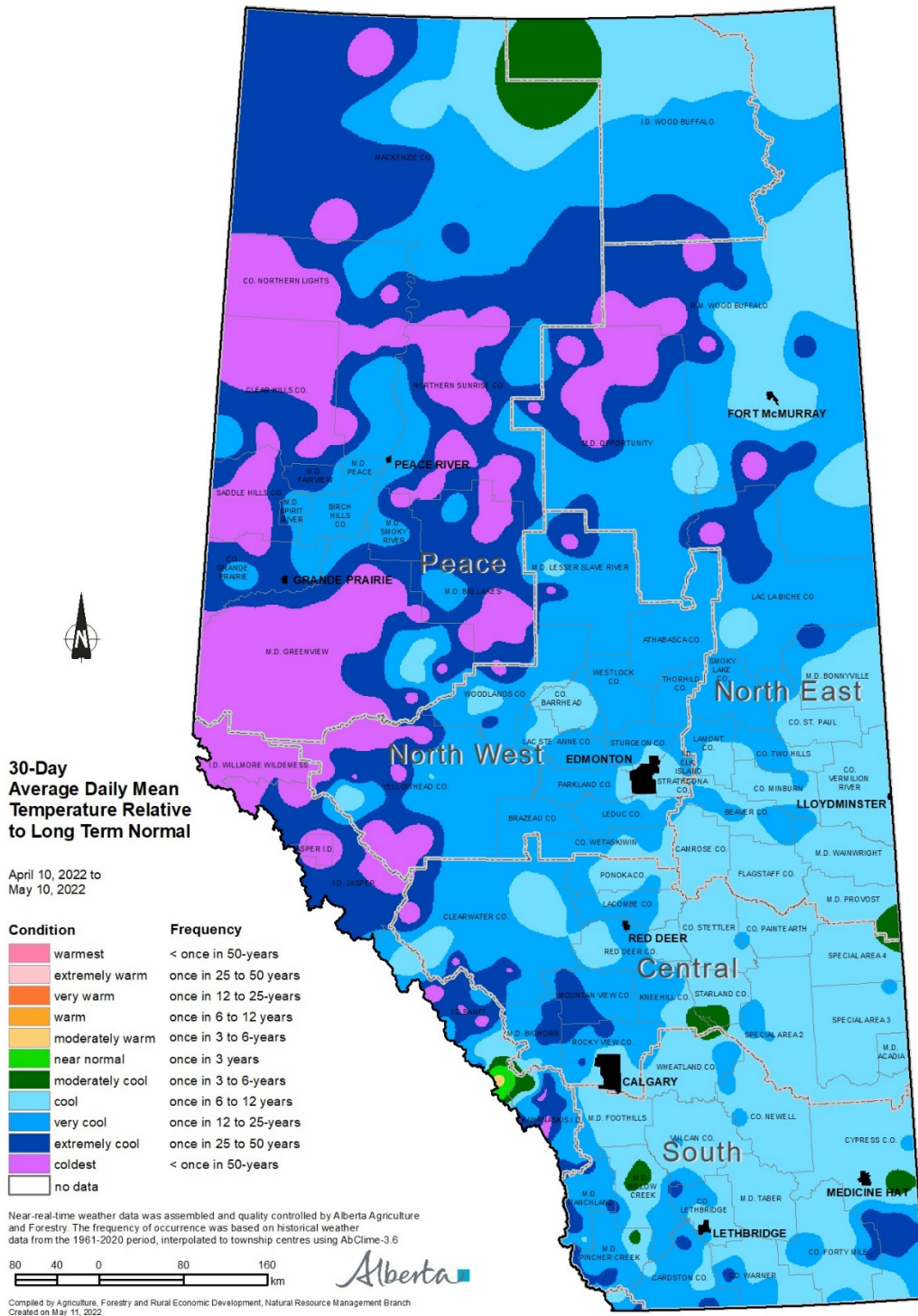


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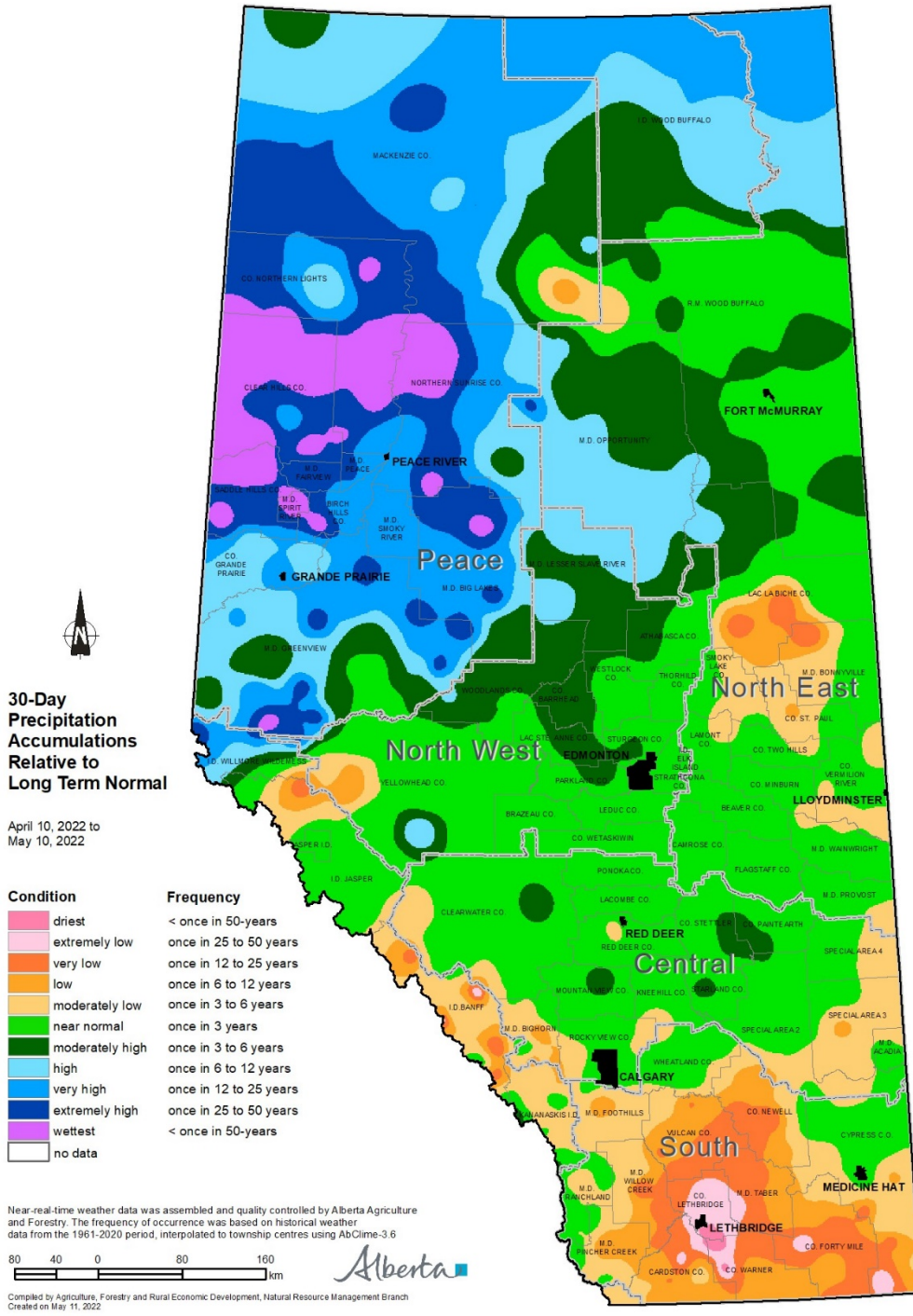
<https://open.alberta.ca/publications/moisture-situation-update>

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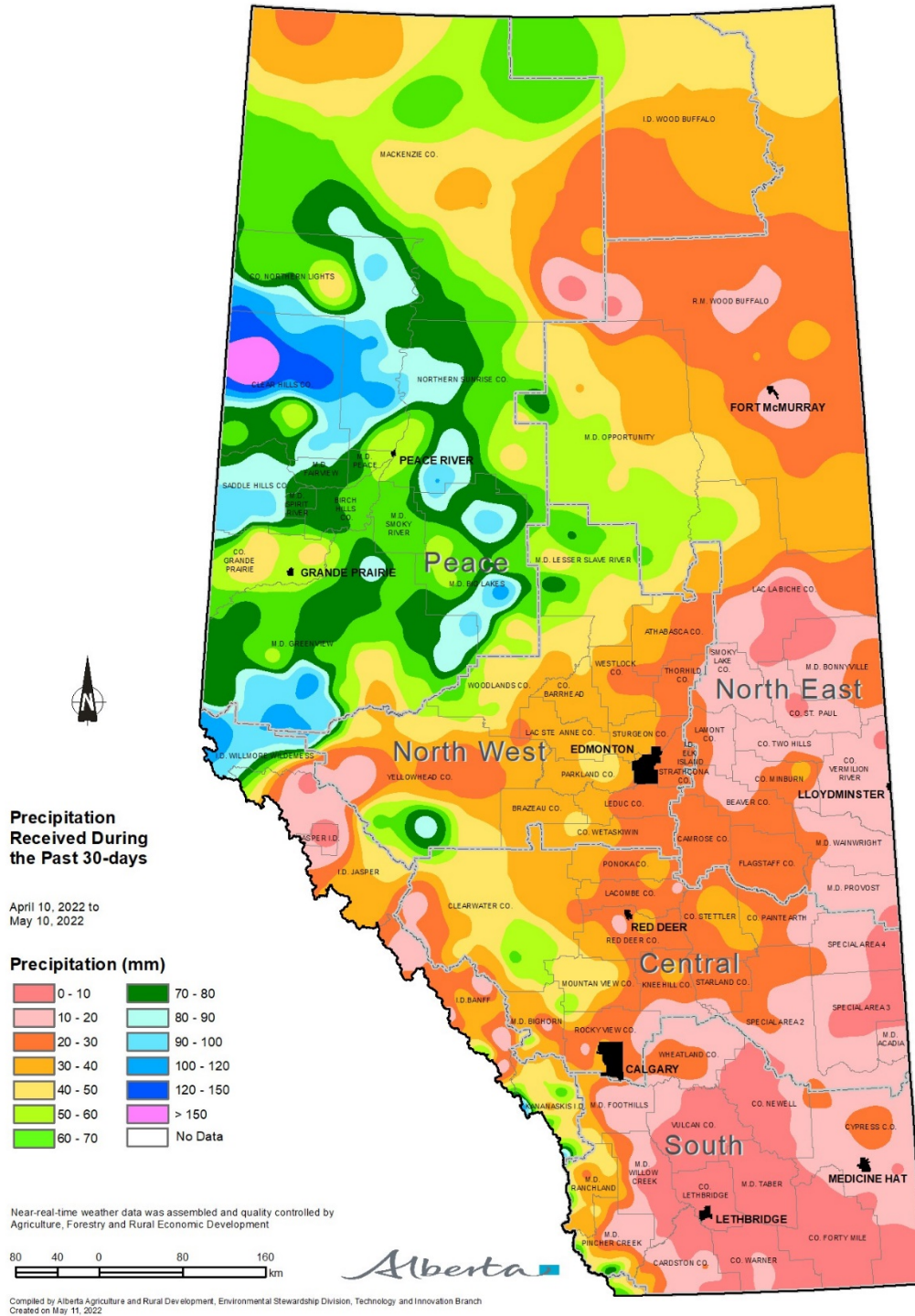


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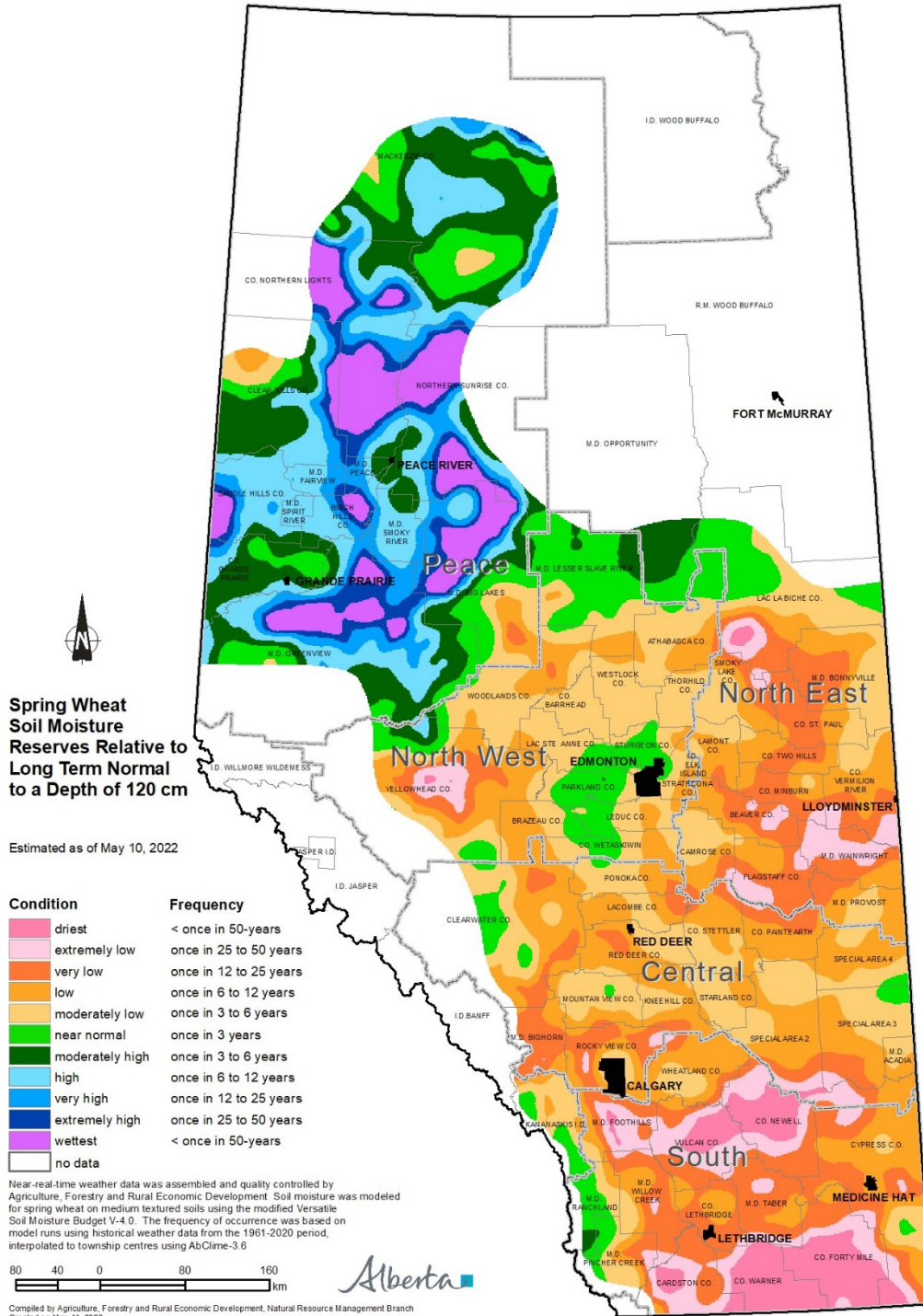


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Map 4



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