

# Agricultural Moisture Situation Update

October 18, 2020

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## Synopsis

Throughout September and the first half of October the weather was generally warm and dry allowing harvest to progress rapidly. Province wide, by October 13th, 96.5% of major crops were combined, beating the 10-year average by nearly 20 percentage points.

Near the end of the second week of October, a large dome of Arctic Air moved into the province bringing widespread snows across the west-half of the province and sending early morning temperatures into the negative double digits across many areas. Looking out over the next week or more, it does not look like temperatures are likely to rebound to near normal anytime soon.

Over the past few months a significant drying trend has emerged that has helped the provinces previously wet areas in the North West, North East and south Central Regions. This has resulted in reduced soil moisture reserves throughout much of the southern Peace Region and most lands across the western-half of the province.

## 7-day temperature trends as of October 18, 2020 (map 1)

Unusually cold weather descended upon the province about October 12<sup>th</sup>. This led to widespread winter-like temperatures, with most areas experiencing an October chill this cold, less than once in 25-years.

Average maximum daily temperatures for this time of year range from about 16°C in the south, to 8°C across the northern Peace Region. Currently maximum day time temperatures over the past few days have hovered in the -5°C range province wide, which is about 15 to 20°C colder than normal for this time of year.

## Accumulated snowfall as of October 18, 2020 (map 2)

Winter snows came early to many parts of the province late last week, affecting lands west of Highway 2, from nearly as far north of Grande Prairie, all the way to the

USA border in the south (map 2). Hardest hit areas include the foothills west of Red Deer, and along a broad corridor extending south of Calgary. It is estimated that some areas received upwards of 40 cm of fresh snow with many agricultural lands around Red Deer receiving upwards of 10 cm.

## 90-day precipitation relative to normal as of October 18, 2020 (map 3)

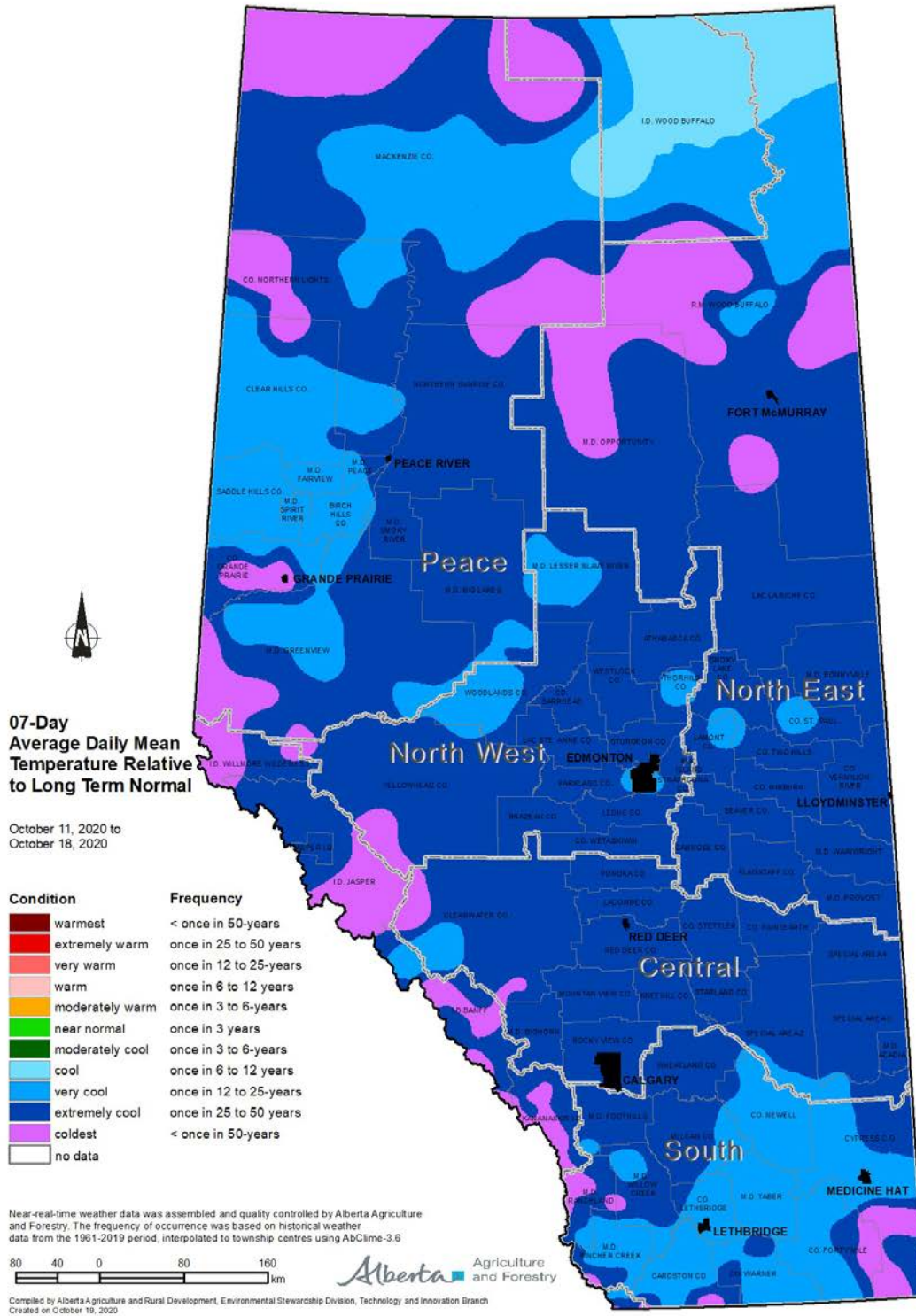
For many parts of the reporting area, mid to late July marked a dramatic shift from the wet cycle we had this spring, to a drier regime that has persisted to this date (map 3). Very dry conditions have prevailed through the southern Peace Region, the central parts of the North West and across the south, particularly along the TransCanada highway, between Calgary and Medicine Hat. In contrast, much of the south-half of the North East has remained near normal.

## Soil Moisture Reserves relative to normal as of October 18, 2020 (map 4)

Soil moisture reserves are highly variable across the reporting area, ranging from pockets of one in 50-year lows through parts of the Peace, the North West and the Central Regions, to near normal or above through the northern Peace Region.

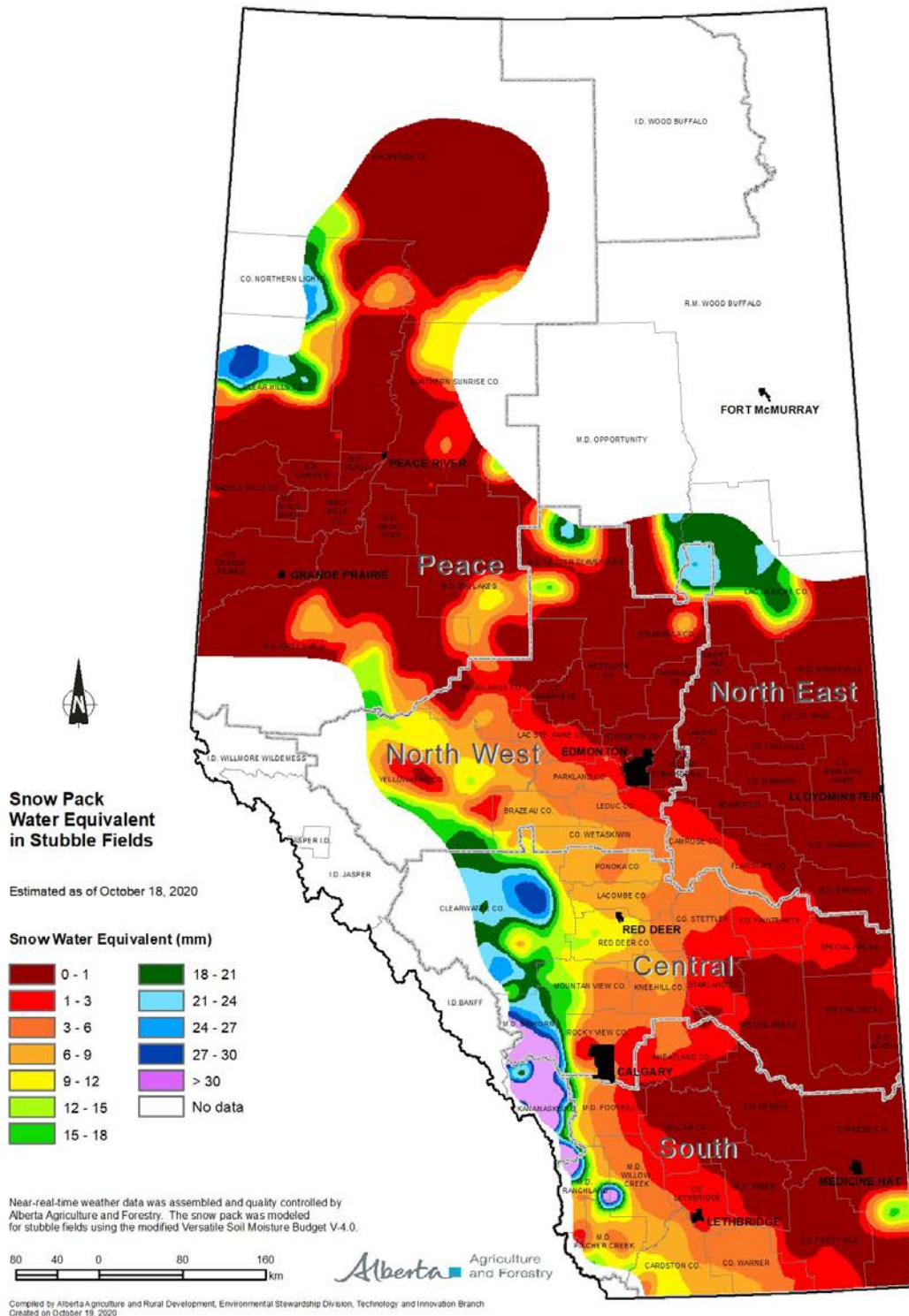
Generally, soil moisture reserves are at least near normal through about 40% of the reporting area with much of this moisture due to excess rains early this season. Of particular note are near normal conditions across the extreme south-eastern parts of the province. Near the end of August moisture was in short supply here. Since the beginning of September, at least three good rains have helped improve conditions.

Map 1



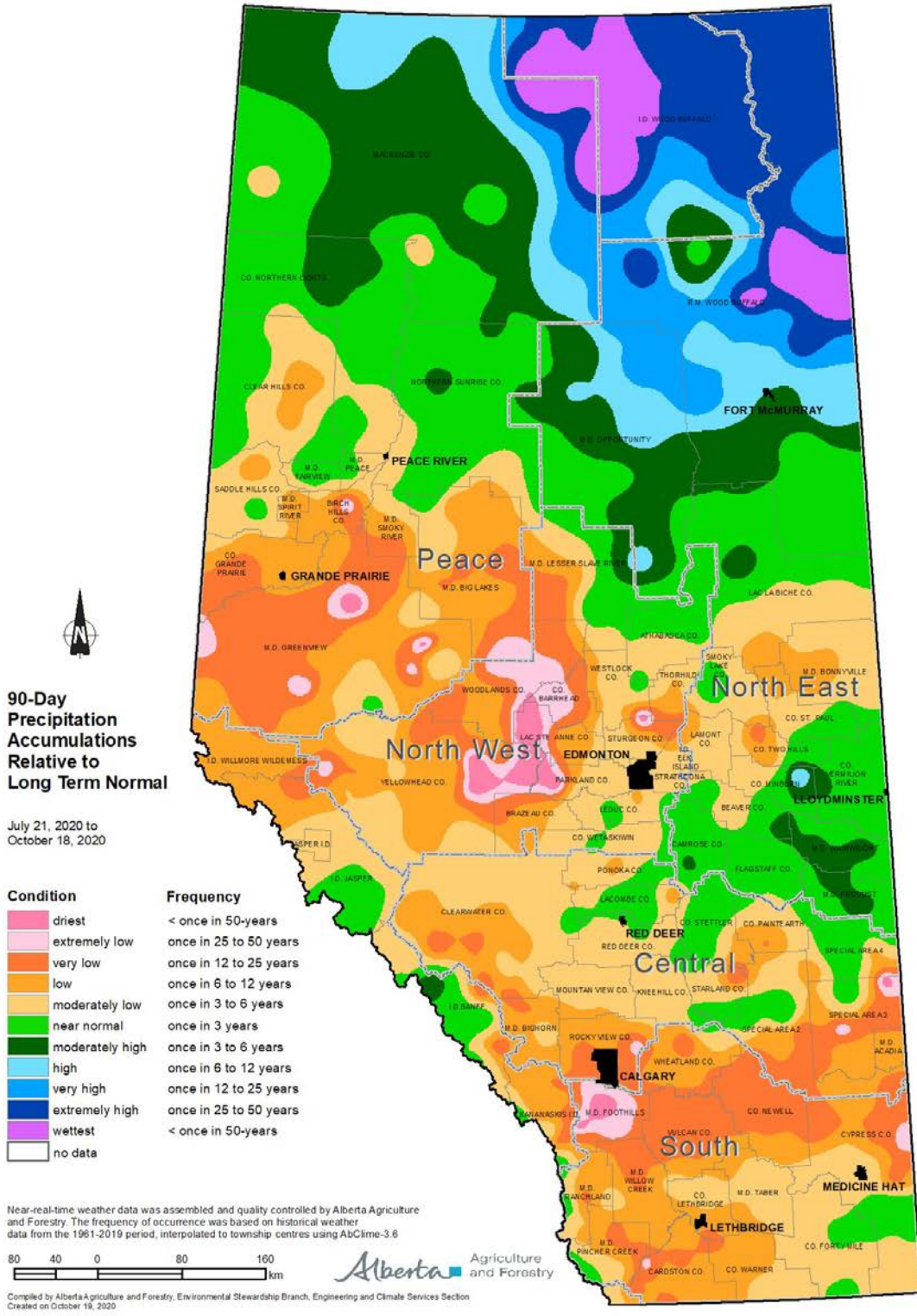
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Map 2

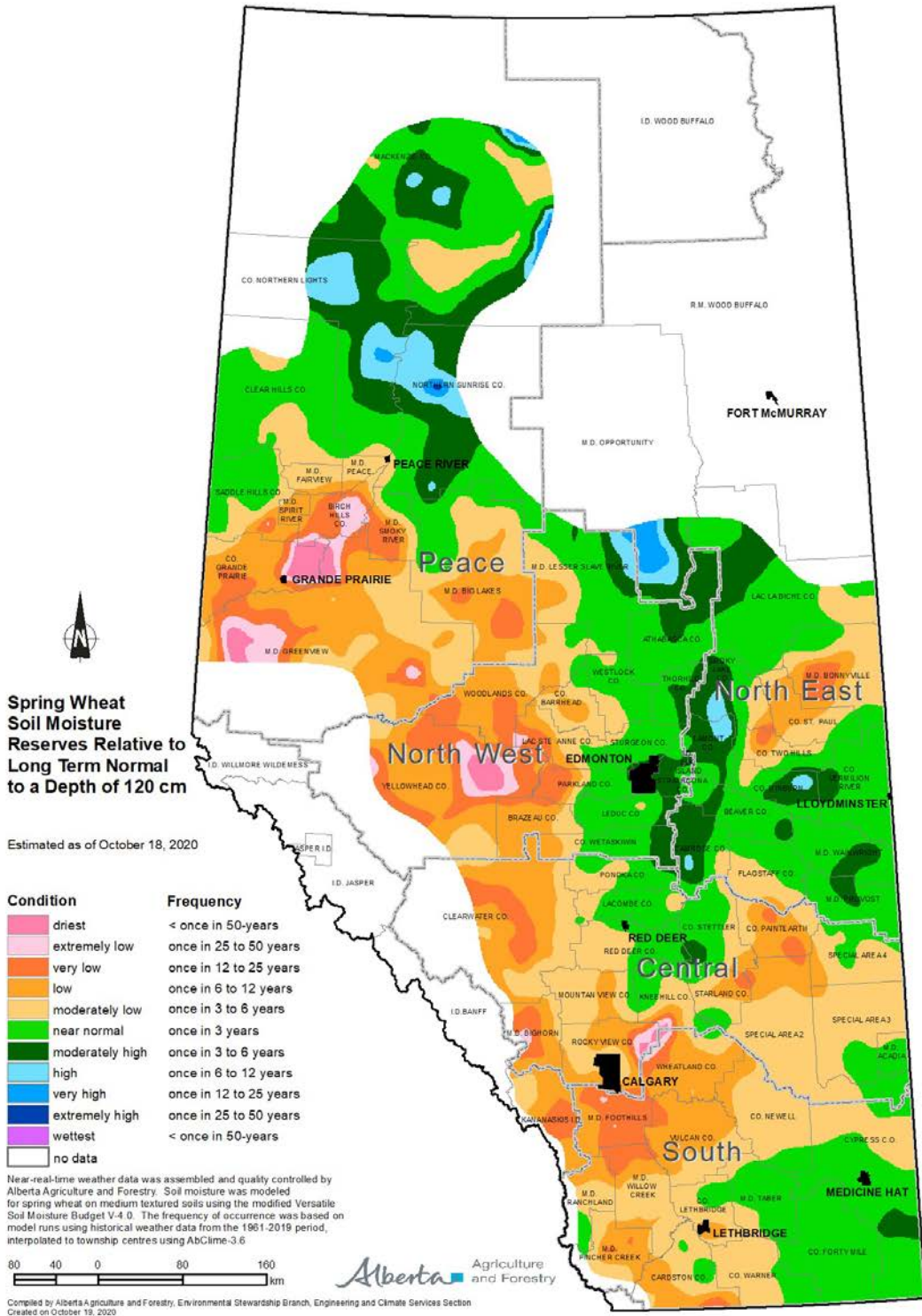


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