Agricultural Moisture Situation Update August 17, 2022

Synopsis

Since the last report (August 10, 2022), most lands lying south of the Yellowhead Highway all the way down the US border have remained dry. Spotty thunderstorm activity delivered much needed rains to some parts of the Central Region, the extreme southern parts of the Southern Region and parts of the North East Region (Map 1).

Warmer than normal temperatures have persisted province wide, along with generally dry conditions. However, forecasts are pointing to moisture on the way, with the southwest boreal (Grande Prairie, Slave Lake) and the northern slopes (Edson, Whitecourt, Jasper) getting rainfall this weekend, particularly Saturday, August 20. Most, if not all of the land, lying south of the Yellowhead highway down to the US border should get significant rainfall early next week (Mon-Wed), including the moisture-starved areas near Calgary, Lethbridge, and Banff.

At this point in the growing season many crops appear to be weathering the dry spell relatively well, as ample June rains followed by generally favorable conditions in early July supplied enough moisture to see crops through critical growth stages. Currently pastures and late seeded crops in the dry areas would benefit from additional moisture now.

30-day precipitation patterns

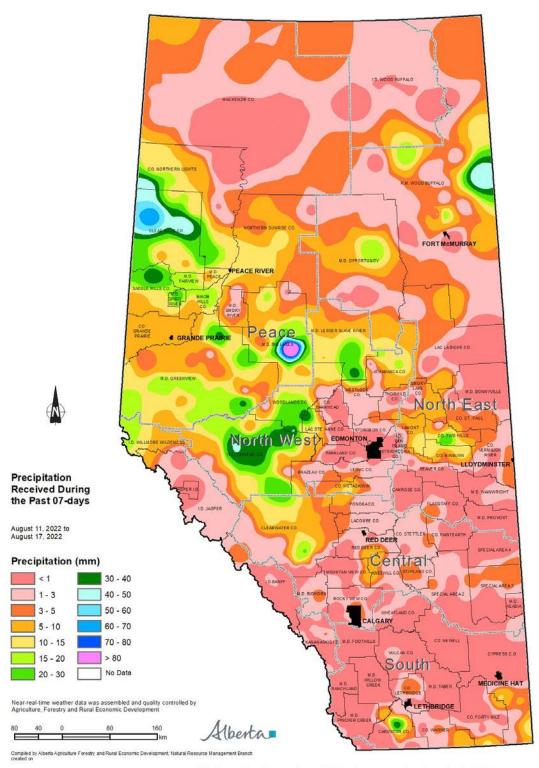
In the face of recent heat, several areas in the province have been experiencing recent moisture deficits, with lands between the US border and Olds receiving less than 20 mm (Map 2). Areas around Edmonton, the central Peace Region and Cold Lake received only 10 to 30 mm of rain (Map 2). For some of these lands deficits are approaching one in 25 to 50 year lows (Map 3). The effect on final crop yields at this point is difficult to assess, but cool temperatures through June along with adequate moisture that extended into mid-July helped build soil moisture reserves and many crops are potentially doing well. Next week's crop report will be released on Friday August 26th and the effects of recent weather on over all crop health and yield potential will be of more value than the generalized statements written here.

Perspective

Even with recent warm and dry weather, over all the 60-day precipitation patterns remain above normal across large areas of the province, while several other areas have been dry (Map 4).

This season has been very interesting, with excessive moisture received across parts of the north-central Peace Region in early spring, and at times more than ample moisture through the west-central parts of the province during June, this followed by an overall drying trend that has persisted since late July. The 100-day map for the period April 19 to July 27 illustrates this well, with most agricultural areas receiving at least 200 mm of moisture during this time frame (Map 5). Relatively drier areas are found throughout much of the central Peace Region, however with adequate over winter precipitation and a late spring melt, soil moisture reserves were replenished by mid-May and helped offset rainfall shortages (Map 6). In contrast, most of the rest of the province is exceptionally dry at this time and relied on June and July rains to furnish much needed moisture. This leaves parts of the Special Areas and a few isolated pockets in the North East Region that are experiencing moisture deficits that have lingered since at least 2021 (Map 5 and Map 6).



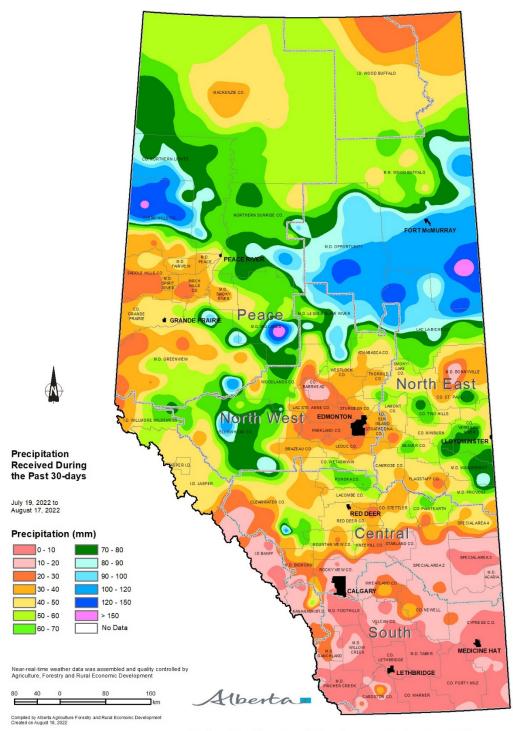


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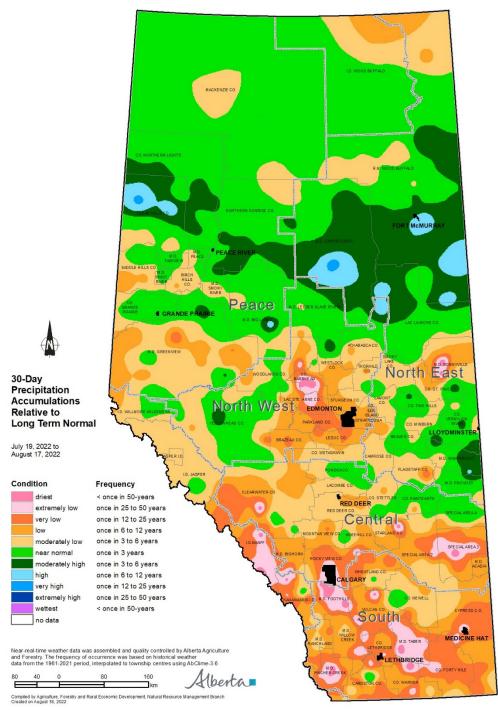
https://open.alberta.ca/publications/moisture-situation-update

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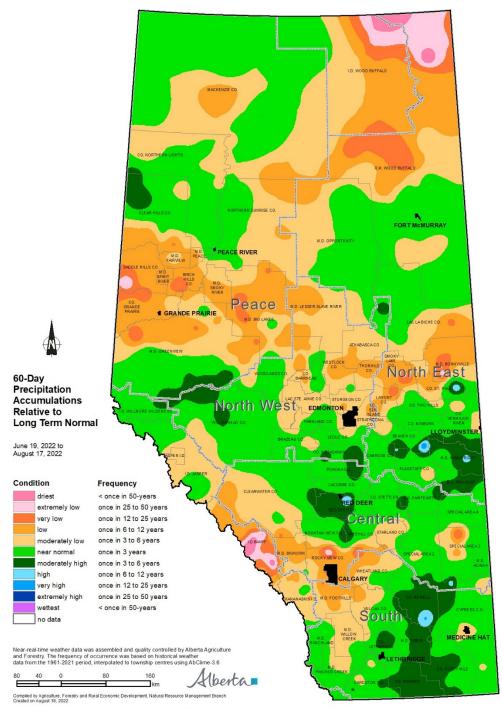


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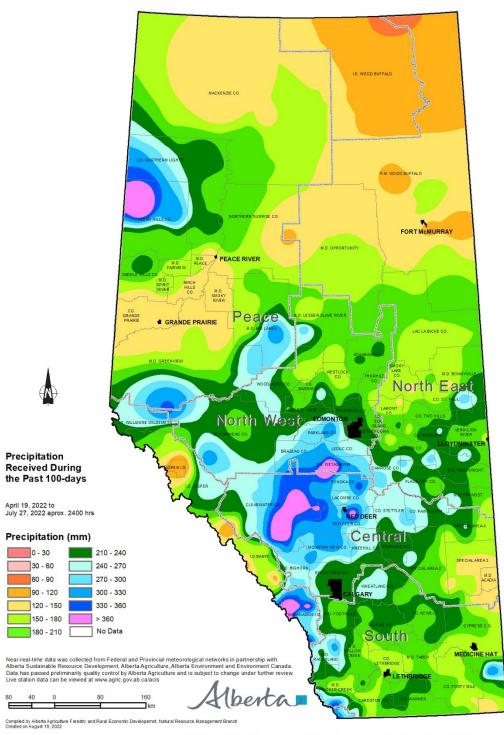


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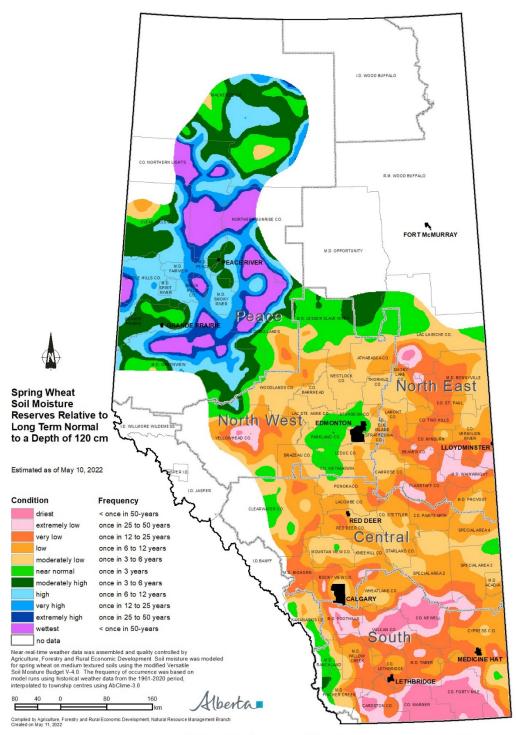
Map 4



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