

Soil Moisture Conditions

Although most areas saw at least some snow and/or rain in April, we enter into the 2023 crop season with marginal moisture conditions throughout east central Alberta. As you can see by the map (figure 1), winter accumulations of snow ranged from moderately low to very low as compared to normal.

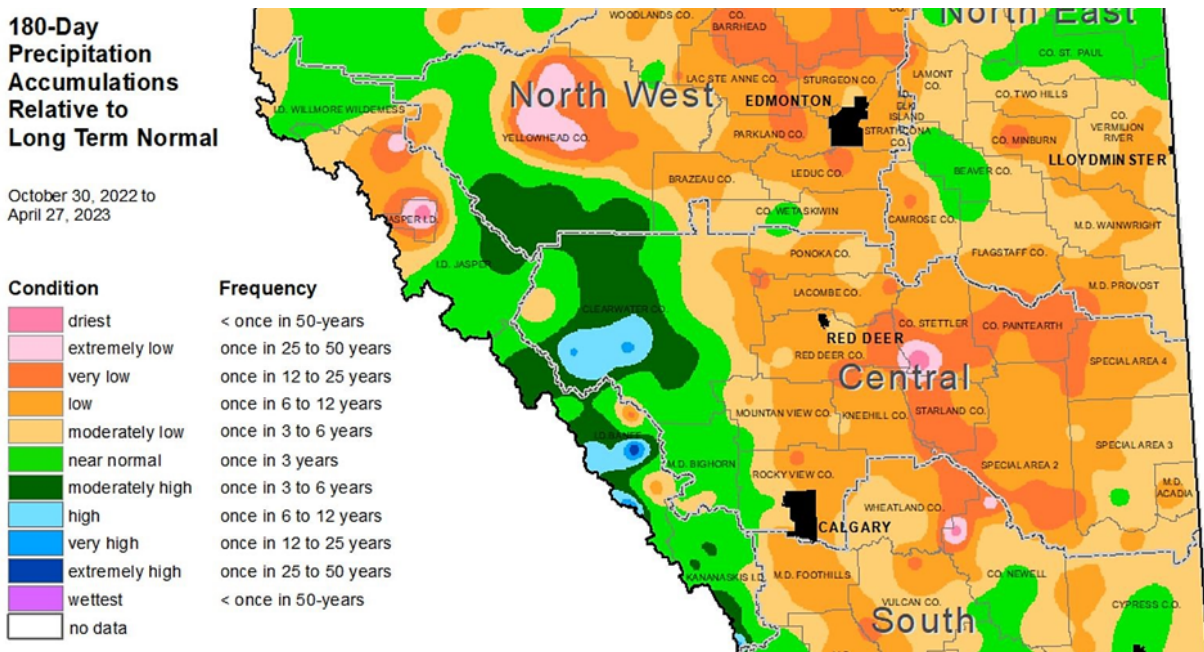


Figure 1

When you combine that with Alberta Agriculture's estimated soil moisture compared to normal (figure 2), most of the region is showing a deficit of 1" to 2" of soil available water, making our starting moisture conditions less than ideal. To top off the list of things that are catching my attention, most long range forecasts I have seen for central Alberta indicate our precipitation for the spring is likely to be "near normal". Meaning we can expect somewhat less than the 4.2 to 4.6 inches that would generally fall in May and June. Put this all together and it would seem there is a good chance we will be counting on timely rains to see us through the start to this growing season.

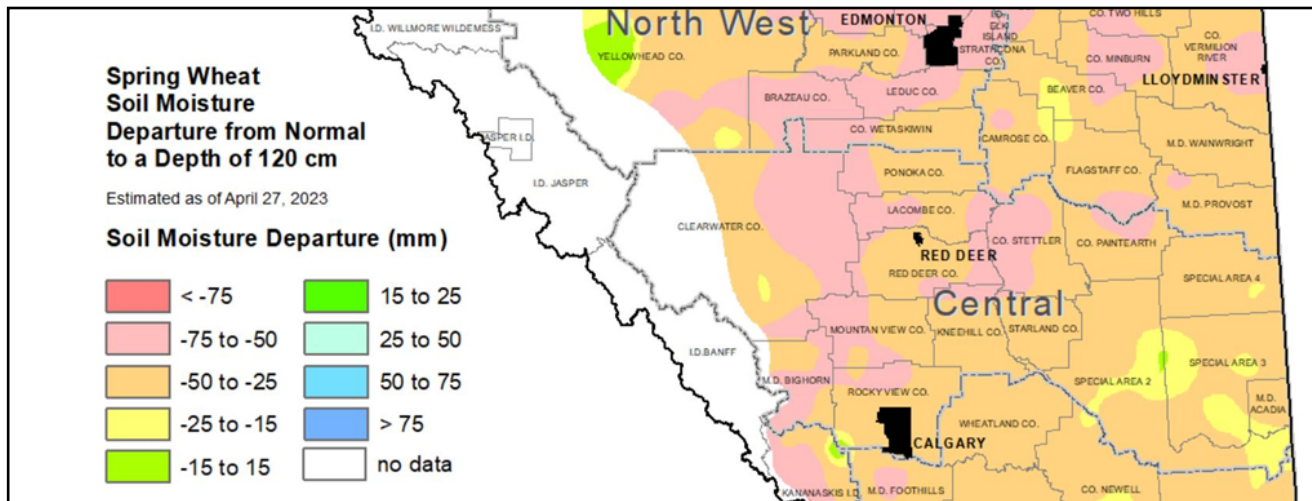


Figure 2

This being the case, it may be worth considering doing everything we can to preserve the soil moisture we do have by minimizing any seedbed disturbances prior to seeding. Hopefully, the majority of residue management happened last fall, but anything remaining should be approached cautiously. A pass with an aggressively set heavy harrow ahead of canola may leave you with a dried out seedbed, and a vertical tillage pass may cost you up to 1" of your valuable moisture, depending on how much dirt you generally move in a pass. You may find this could be a good year to show a little more tolerance for residue than you normally would, or possibly just doing the worst parts of the field instead of going corner to corner.

Another concern that often comes up in drier springs is seeding depth. While cereals can tolerate deeper depths relatively easily, there are limits to what we can do with canola. An Ag Canada study showed canola emergence drops from 62% at 0.4 inches all the way down to 37% at 1.5", so keep that in mind if you start chasing seedbed moisture this spring. While not all studies show this drastic of a difference, remember that any time you seed below 1", you should start increasing the seeding rate to compensate for the increased mortality. And there comes a point when it becomes better to seed into dust and hope for rain, rather than seed too deep. Everyone will have their own idea of what that depth should be, and for me it is anything below 1.5 inches.

Also remember that when you are dealing with marginal moisture, consistency in depth across the drill becomes critical. Having some rows seeded into the moisture and some not gives an uneven emergence that can cause management issues all year long. Spend some extra time ensuring the drill is level and that worn openers are not an issue. Above all else, slow down! This will greatly help with the uniformity of seeding depth, reduce seedbed disturbance and result in more even emergence. As always, when we get to this time of the year and things start to ramp up, I wish everyone a safe and productive seeding season. And remember, no shortcut is worth the risk of not coming home safe at night

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