

# The Canadian Agriculture Weather Prognosticator

Volume XVIII Issue VI

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July 31, 2026

## World Weather To Watch

- Northwestern U.S. Corn Belt too dry and hot
- Not much relief in southern Prairies or parts of northern U.S. Plains
- France, neighboring areas in Western Europe still dry
- India crop conditions continue to improve from recent monsoon-rain
- Southern Australia grain, oilseed prospects still good; Queensland too dry
- China soil and crop conditions are rated favorably; Super Typhoon Dolphin may impact eastern China in second week of August
- Parts of southern Russia may now be a little too dry while a part of the New Lands spring wheat and sunseed areas area little too wet
- Southern Indonesia moving into drought

## Southwestern Prairies To Dry Down More

Who would have thought, heading into August, we would be talking about a growing concern for dryness? DRY-NESS??? With the amount of rain we saw earlier this summer (not to mention the late-season snowstorms in spring), there should be plenty of moisture to go around. However, moisture deficits in the topsoil expanded across the southwestern Prairies since mid-July as a dominant high-pressure ridge took hold over central North America.

Southern Alberta, many areas in southern Saskatchewan, and neighboring areas gradually dried down as the ridge limited rainfall and brought much-warmer than usual temperatures to the region. Subsoil moisture is still rated adequately for most and those longer-rooted crops should be drawing moisture from these levels. There is still a growing need for timely rain in August, especially those crops that were planted late or experienced sluggish development during the wetter periods.

Other parts of the Prairies still saw waves of erratic rain and thunderstorms since mid-July as disturbances tracked over the ridge. The moisture profile improved for the previously dry areas in Peace River country and neighboring locations while most other locations had enough rain and moisture to stimulate aggressive growth. Things have not been perfect by any means with many crops still behind normal development stages for this time of year despite some recent heating. Damage from storms have also impacted crops in several locations.

With all that being said, much of the Prairies would welcome a good shot of rain in the coming weeks. That, along

with periods of warmer weather, should help support good or improving later-season development. The ridge over central North America helped cut off moisture from the monsoon and a shift in the upper-air pattern is needed to allow for some of that moisture to make its way near or into the Prairies.

I'm sure most have heard all about El Nino and how this even may be one of the strongest on record as we make our way late in the year and early 2027. While El Nino has impacts for varying countries and agricultural regions around the world, signals for North American summers are relatively muted in an El Nino environment. Impacts from El Nino are most prevalent during the winter months and we will talk about that when the time comes. That does not mean we won't see a split jet stream pattern later this summer and early this autumn. In fact, a weak El Nino signal in the upper-air may occur as we make our way into August. We also need to watch what the Madden-Julian Oscillation will do in the coming weeks, along with moisture feedback in the soil and the potential for tropical disturbances in the Pacific Ocean.

Looking back at previous El Nino environments for August, there was actually a lot of mild to cool conditions extending from much of the Prairies and northern Plains into a large section of the Midwest, U.S. northeast, and eastern Canada. The upper-air pattern for this forecast to verify would be a high-pressure ridge over western North America and an upper-level low-pressure trough over eastern Canada. Well...this is actually the upper-air profile we will be seeing to start the

## Southwestern Prairies To Dry Down More (continued from page 1)

month, at least in part. The trough will be relatively weak while the pernickety ridge that was recently over central North America shifts slightly to the west over western North America. We may see another trough make its way over the ridge during the second week of August, though some recent model trends suggest this trough may linger near or over the Gulf of Alaska. Forecast models suggest the ridge will return to western North America toward mid- and late-August and may re-intensify, which is likely given the prevalence and intensity of the drought over the western U.S. The position of the MJO in August may also increase the likelihood of this upper-air pattern.

The tropics over the western Pacific Ocean may become active during the second and third week of August. If a stronger disturbance evolves and eventually joins with the jet stream, we could see another trough potentially impact the Prairies late in the month. While chances for this occurring is relatively low, it will still be something to watch.

What does this upper-air pattern mean for the Prairies? Temperatures will likely trend mild to even cooler than normal at times for at least the first week to ten days of the month. The greatest deviation from normal temperatures will occur in parts of Manitoba and Saskatchewan while slightly warmer air remains over Alberta, at least in the west and south. With the ridge potentially intensifying over western North America later in August, warmer air will return to the western Prairies. A weak trough may linger over

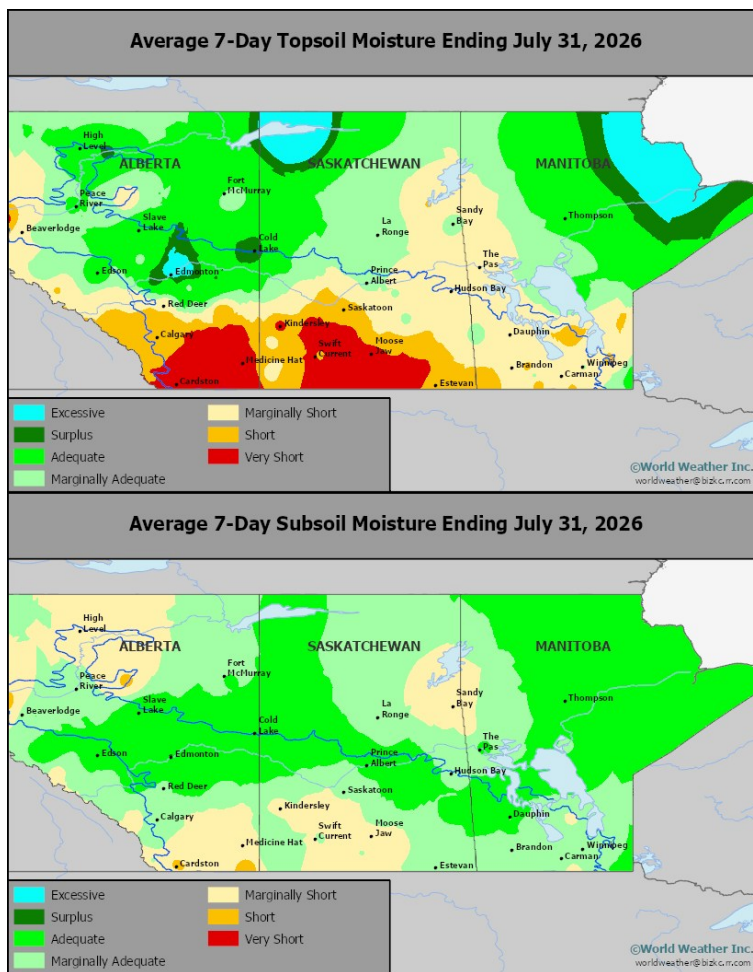
eastern Canada later in the month, which could keep milder conditions in place for Manitoba and eastern Saskatchewan at times. The temperature profile will actually match August 2023 (which is one of the better analog years) fairly closely for the Prairies with temperatures trending near to slightly below normal overall

Saskatchewan will miss out on some of the heavier rain events and may not receive enough precipitation to significantly bolster soil moisture. Disturbances will then make their way across the northern Prairies later in August once the ridge returns, which could continue to generate waves of erratic rainfall and thun-

derstorms in the north and east. The position of the Madden-Julian Oscillation making its way from Phase 5 to 6 (or from areas near Indonesia and Malaysia into the western Pacific Ocean) tends to enhance monsoonal rain in the U.S. southwest days to weeks after the event. With the potential for greater than usual moisture in the atmosphere from the monsoon and additional disturbances making their way near or into the Prairies, a relatively active pattern may continue through the end of August.

The main issue with the precipitation forecast is the ongoing drought in western sections of the U.S. Monsoonal moisture may struggle to travel over the drought areas and reach the Prairies, which will impact the overall amount of rain that will occur. In August 2023, many areas in the western U.S. were actually wetter than usual, though the moisture profile across North America was very different compared to now with many areas in the western U.S. drought-free at the end of July.

While the Prairies will have several opportunities for precipitation in August, atmospheric moisture may again be lacking at times. Precipitation totals will still trend near to slightly above normal for much of the



in Manitoba and eastern Saskatchewan. The western half of the Prairies will see temperatures trend near to slightly above normal for the month despite the cool start to August.

The precipitation pattern for August is a little more muddled. Troughing over Canada, combined with monsoonal moisture, could lead to periods of wetter than usual weather during the first week to ten-day period of August. Many areas in southern Alberta and southwestern

# Late-Season Growth May Be Sluggish At Times

Prairies with the exceptions for southern and west-central Alberta and southwestern Saskatchewan. The southwest corner of the Prairies will not be completely dry during this time and periodic rain may still be enough to support good late-season growth for the more advanced crops.

Additional rain and a cool start to the month in August will slow the expansion of drought or abnormally dry conditions across the Prairies. Most will have enough moisture to support new growth outside the driest areas in the southwest. However, the return of mild temperatures may again slow new development. Warmer weather later in the month should expedite growth, at least for the western half of crop country. The active weather pattern may again cause periodic storms that could generate damaging winds and hail as well.

Looking at September, the main concern heading into the month will be the need for continued warmth. An early-frost this year may significantly hurt production potentials, especially if the later-planted crops will still be finishing up with development. Warmer-biased conditions will likely prevail for the first ten days of September, potentially even into mid-September as the ridge remains a common feature over North America. Development of a weak trough or two will still be possible over eastern Canada as disturbances continue to make their way over the Prairies, though these disturbances will likely be too weak to send a strong pool of colder air into

the Prairies. These disturbances and some lingering moisture from the monsoon will continue to promote periods of erratic precipitation. Several areas in the northern and eastern Prairies may trend a little wetter than usual with sluggish maturation and early-season harvesting a possibility.

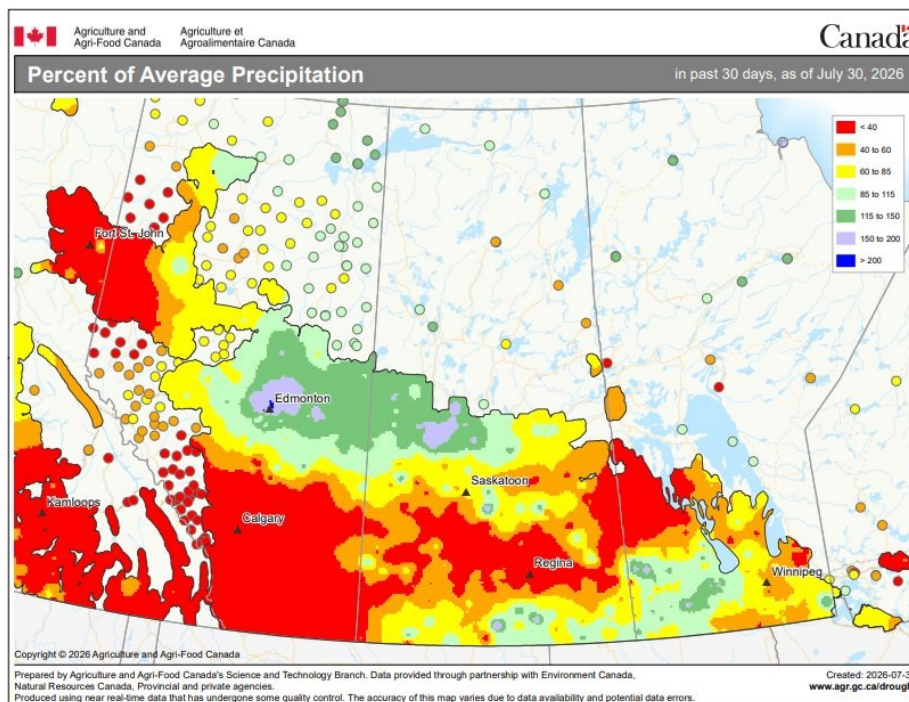
A transition in the upper-air pattern is likely during the second half of September, generally from the September 15 – 21 period. The 45-day upper-air cycle could send a stronger wave of colder air into the Prairies

off disturbances this far out is difficult. Chances of another cut-off low occurring during this time will be relatively low, but will be something to watch in the coming weeks.

Temperatures for the month of September will overall trend near to above normal for the Prairies. The greatest deviation from normal temperatures will be in western and southern Alberta where the ridge may set up for at least the first ten-day to two-week period of the month. There will be a few pockets in northern and eastern Manitoba and immediate neighboring areas that will ultimately trend slightly cooler than usual for the month due to the potential for cooling mid-month and the potential for trough development over eastern Canada later in the month. Precipitation totals will trend near to slightly above normal for much of the Prairies.

Overall, while the chances for early frost and freezes is relatively low in September, maturation and harvest conditions may be

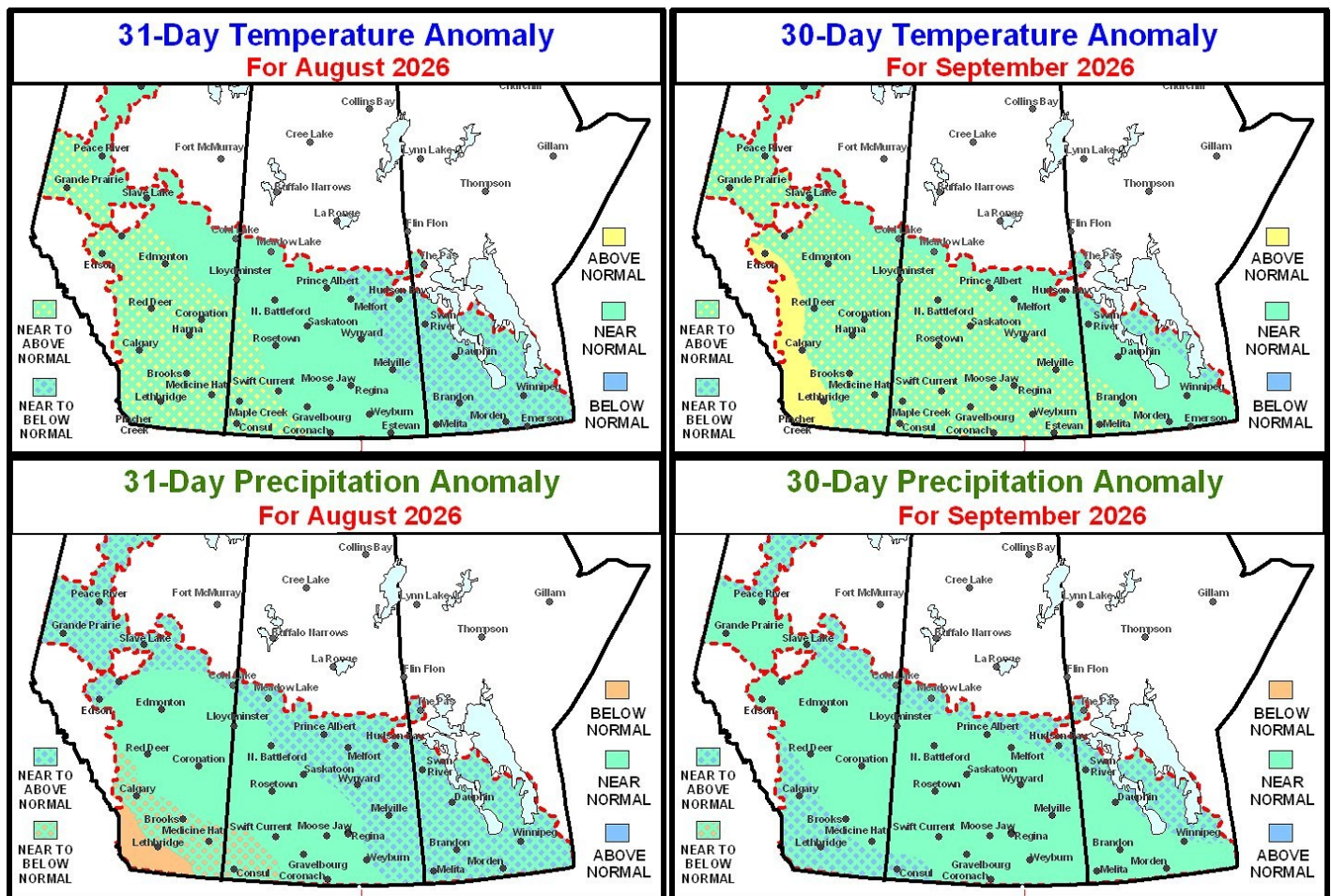
disrupted at times due to the waves of rain and potential for cooling mid-month. Usual timing of a frost-freeze event could also impact the later crops that may not yet be fully mature. Warmer than usual conditions later in August and early September should help mitigate the threat for damaging conditions due to cold. The main challenge for the harvest season will be the active weather pattern that will often disrupt fieldwork progress.



during this time, increasing the possibility for frost and light freezes. However, there will likely be too much warm air lingering over North America to promote widespread freezes. Most analog El Nino years also suggest warmer than usual conditions overall for September, decreasing concerns for early frost and freezes. In 2023, a cut-off upper-level low-pressure center did promote pockets of frost and light freezes in Alberta and Saskatchewan from the September 19 – 22 period. While this lines up with the 45-day cycle, predicting cut-

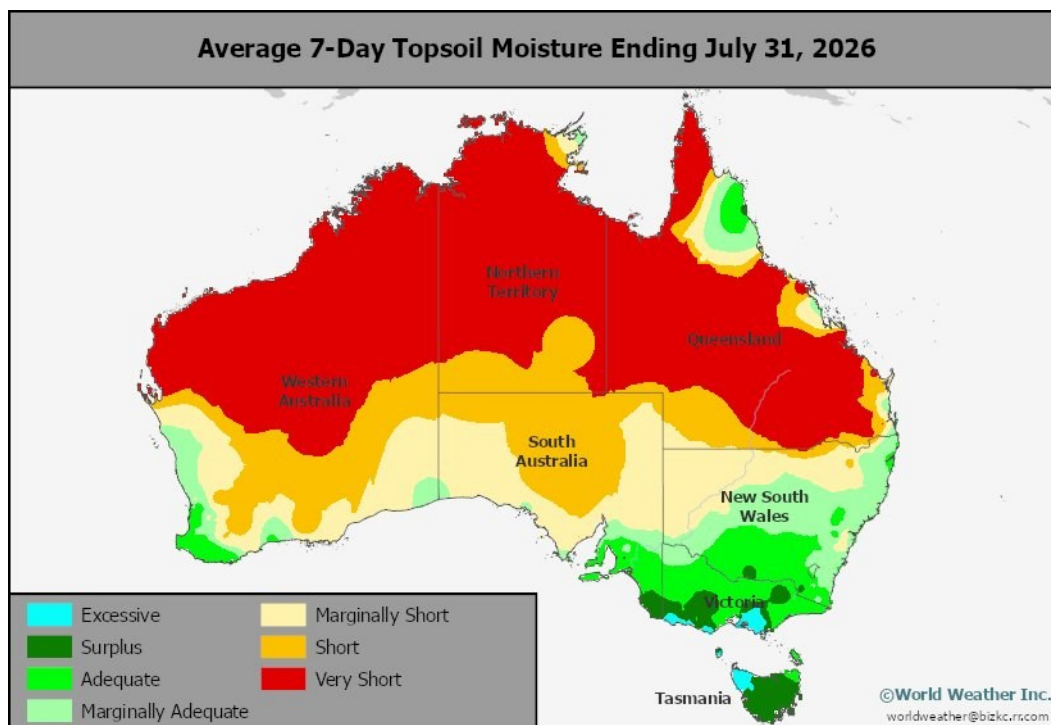


# August and September Weather Outlooks

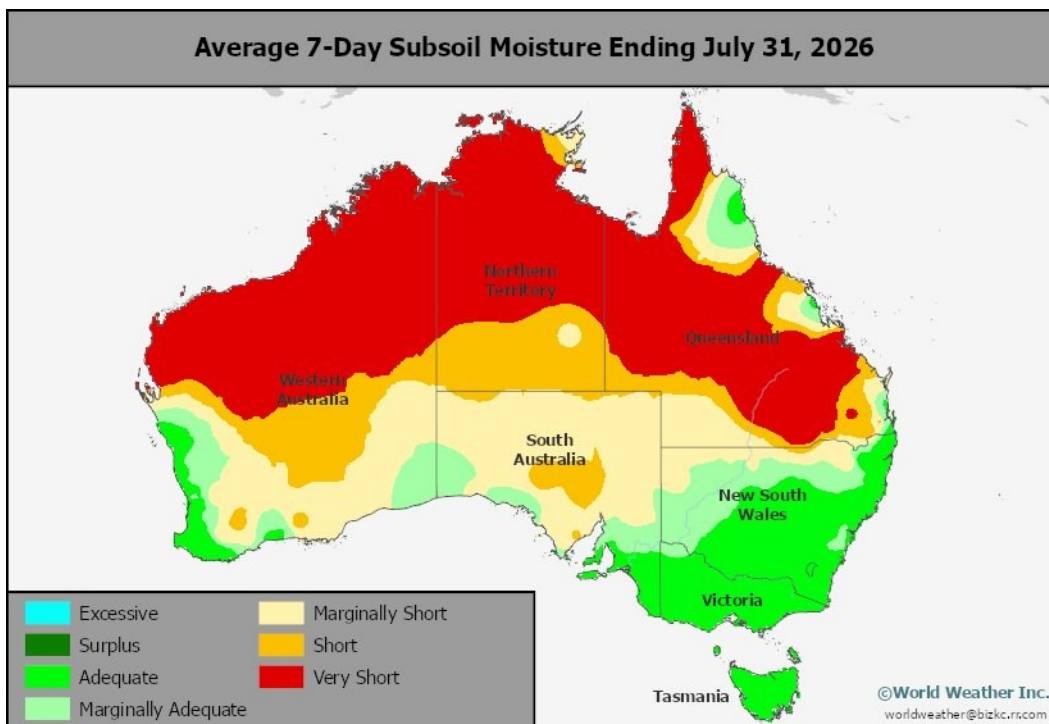


Dryness will likely intensify for the southwest corner of the Prairies in August despite some periods of rain. Later-planted and shorter-rooted crops may be stressed as the ground continues to firm, especially during the warmer stretches. The potential for more rain in September may come too late in the growing season for stressed crops. Periods of mild temperatures may also slow growth at times for Manitoba and eastern Saskatchewan in August.

## Australia Crop Moisture Situation

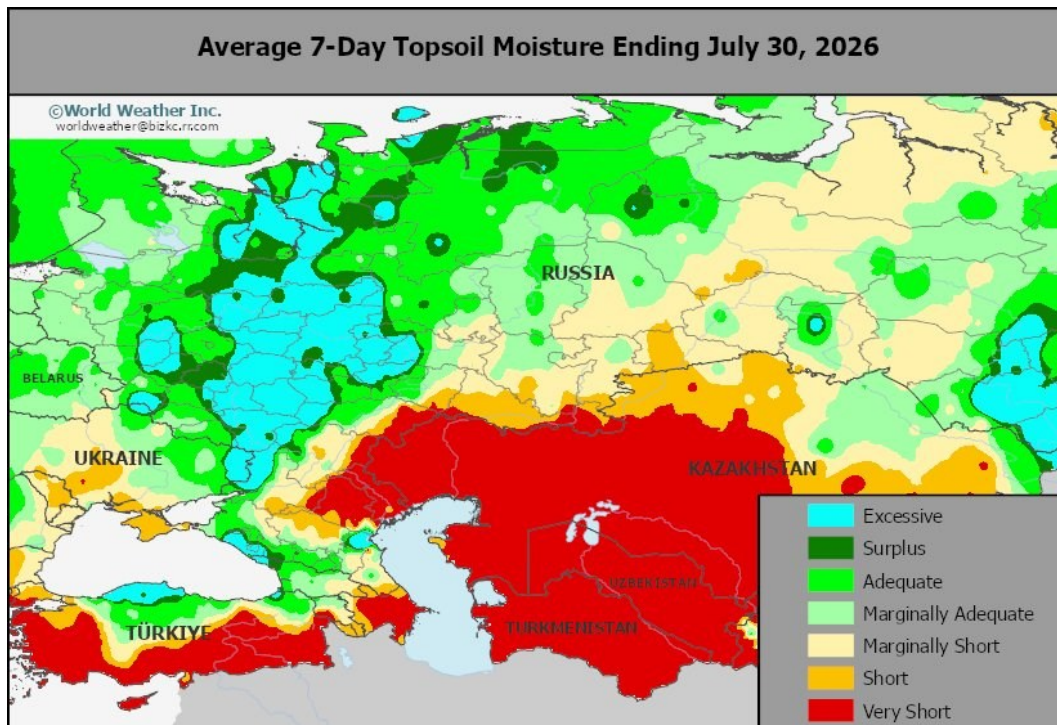


Looking around the world, production potentials for Australia's winter wheat, barley, and canola are relatively favorable. A large section of crop country received timely rain over the planting with periodic rain in recent weeks supporting aggressive growth. El Nino years tends to promote drier than usual weather in eastern parts of Australia's production region, so planted acreage is lower compared to last season. However, crops that were planted are developing favorably, at least so far. The main production areas in the south will see a good mix of rain and sunshine in the coming weeks that will maintain a good outlook despite El Nino.

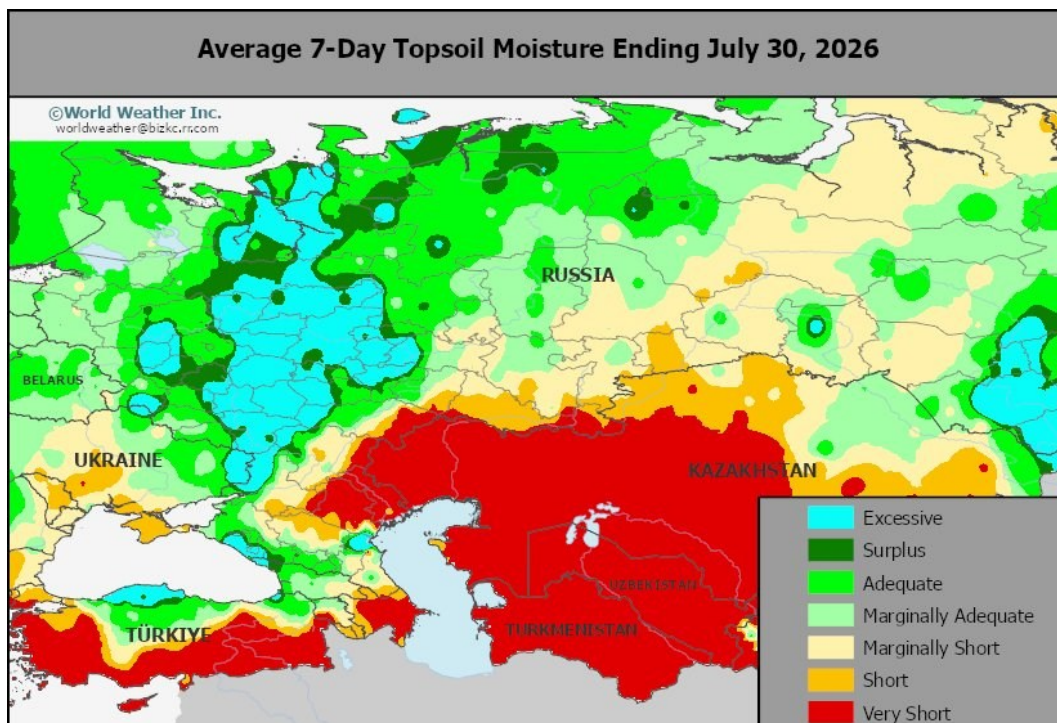




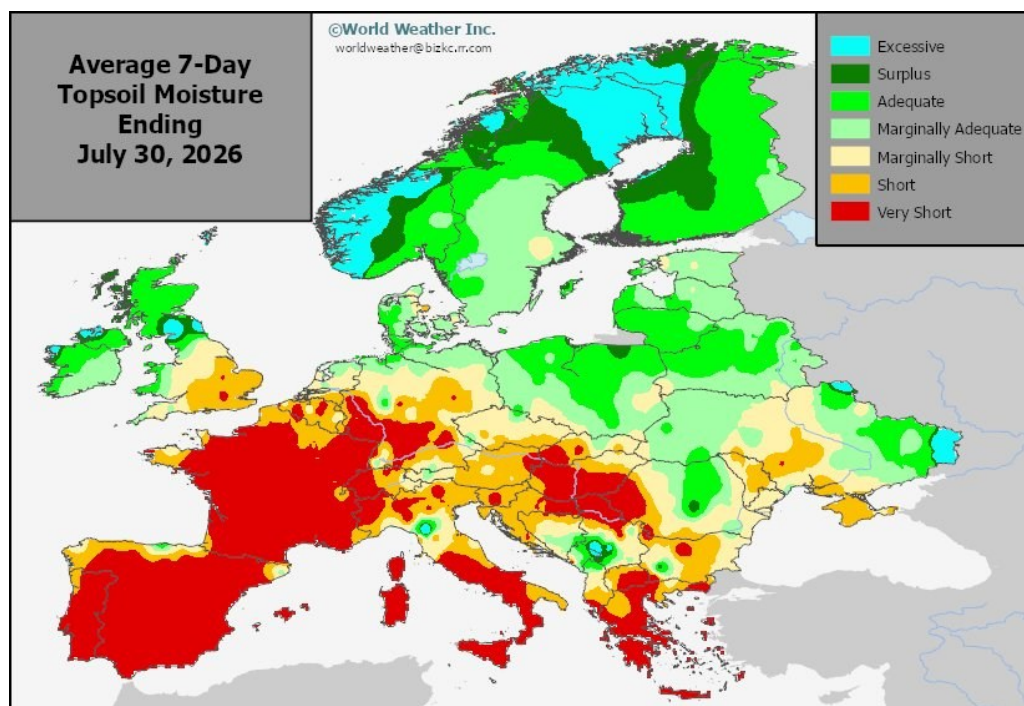
## Russia Moisture Profile Still Looks Favorable



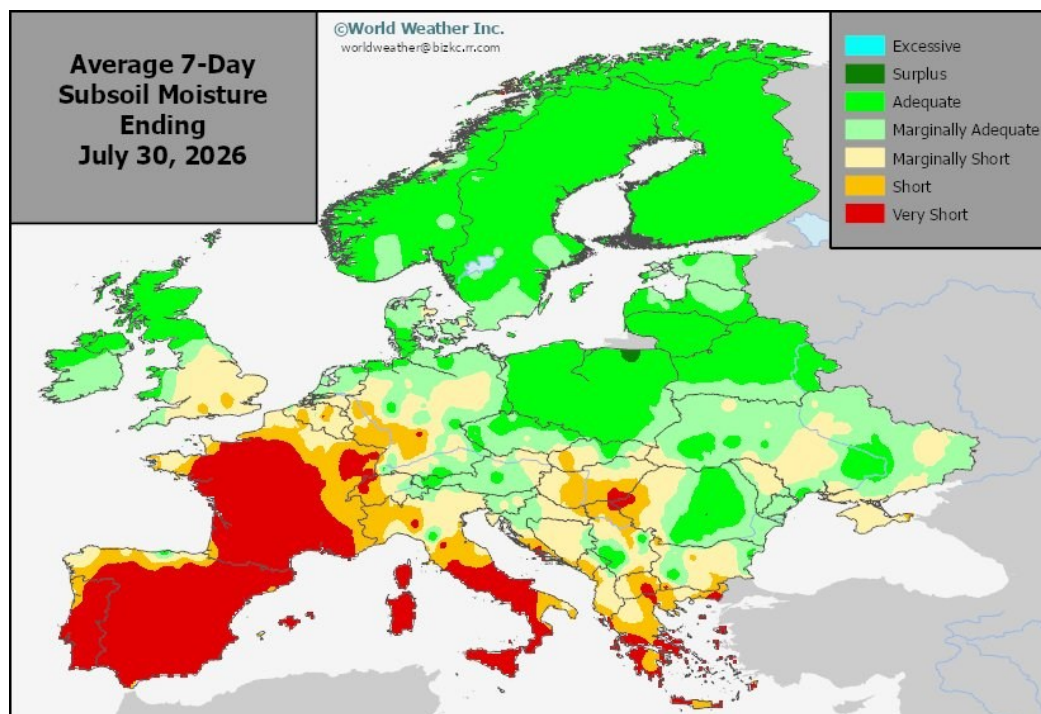
Russia's winter grains and oilseeds are in good shape from timely precipitation over the winter and this spring. Summer crops are more variable as many areas in the west are wet while other production areas farther east and southeast have been drying down. The driest areas will receive limited rain with warmer than usual conditions in the coming weeks and dryness concerns may increase.



## Europe Too Dry West; Southeast Trending Drier Too

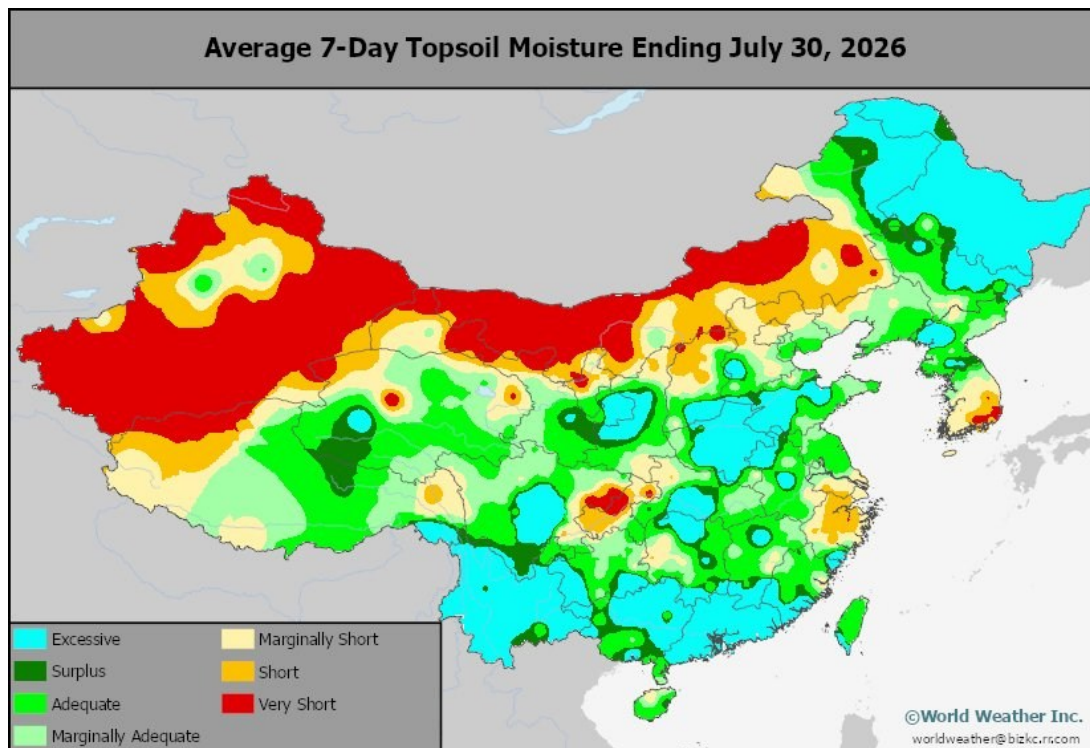


Europe crop prospects are highly variable. France and neighboring areas in Western Europe continue to struggle with severe moisture deficits. The lack of rain and periods of hot weather have already hurt production potentials. Southeastern Europe also trended a little too dry in recent weeks while northeastern Europe saw timely rain. Alternating periods of rain and sunshine are slated for much of Europe in the coming weeks with periods of warmer than usual weather. Production potentials will remain mostly unchanged with significant cuts likely in France.

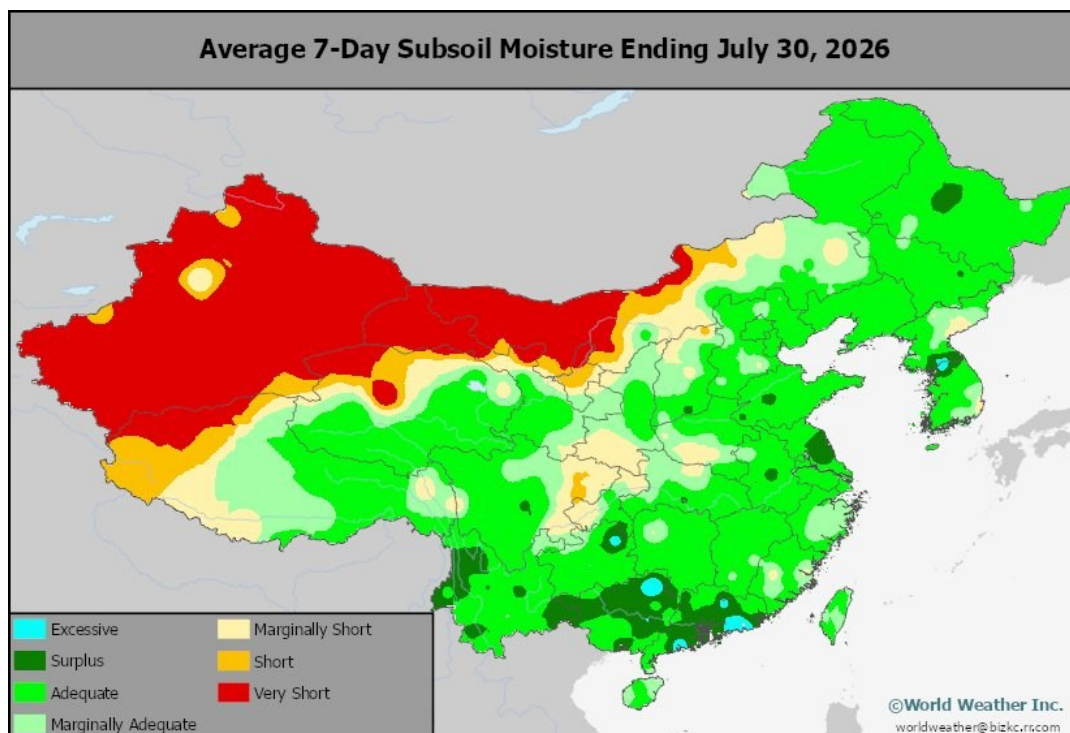




## China Soil, Crops Rated Well; Typhoon Dolphin Coming

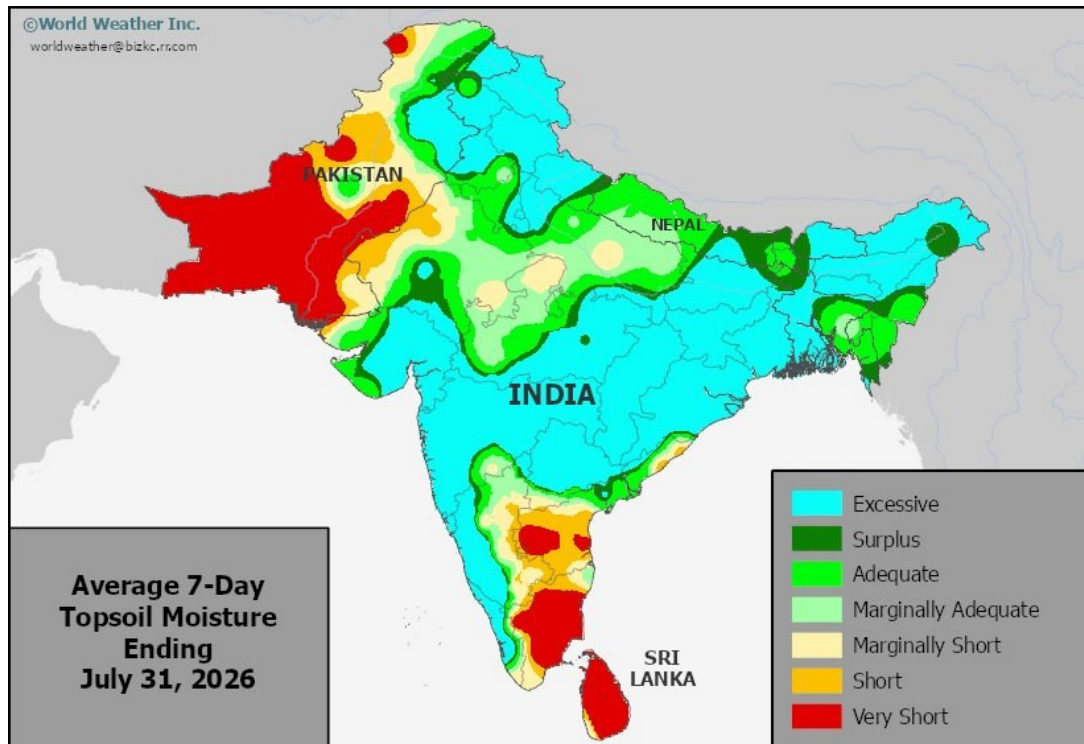


China's production areas generally received enough rain to support new growth in recent weeks despite pockets of dryness for some and periods of abundant rain for others. Crop conditions will remain relatively favorable in the coming days. Super Typhoon Dolphin could eventually impact the country, though confidence is low for the exact track this system will take later in August.

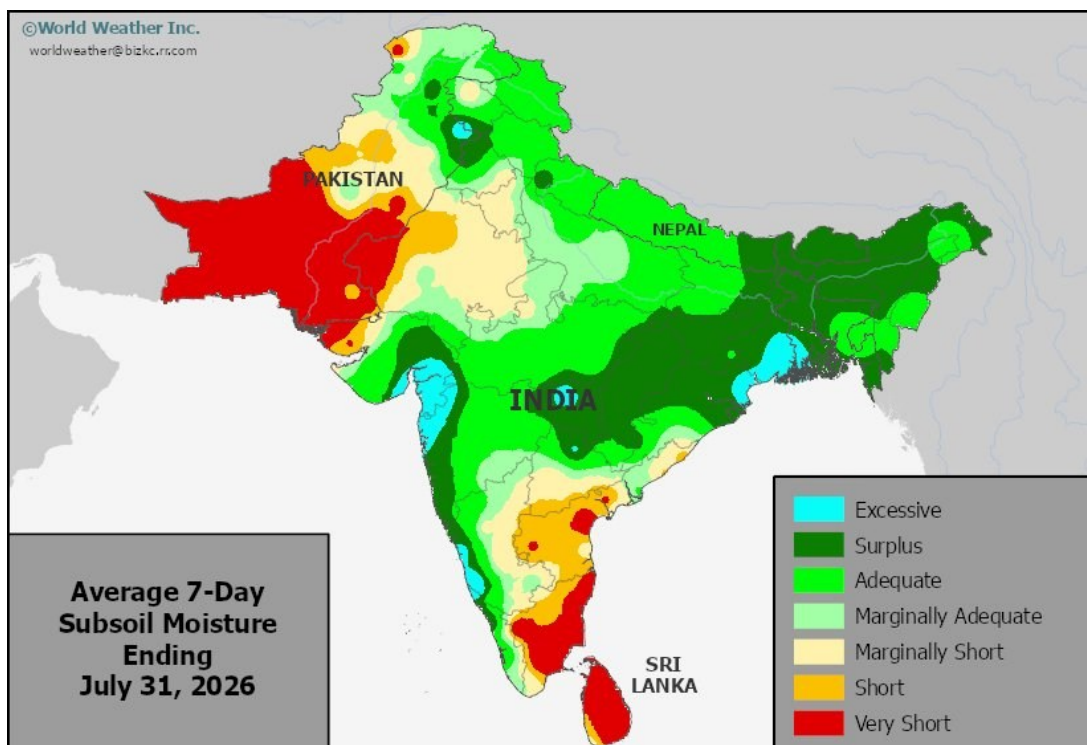




## India Crops Making A Big Comeback After Dry Start

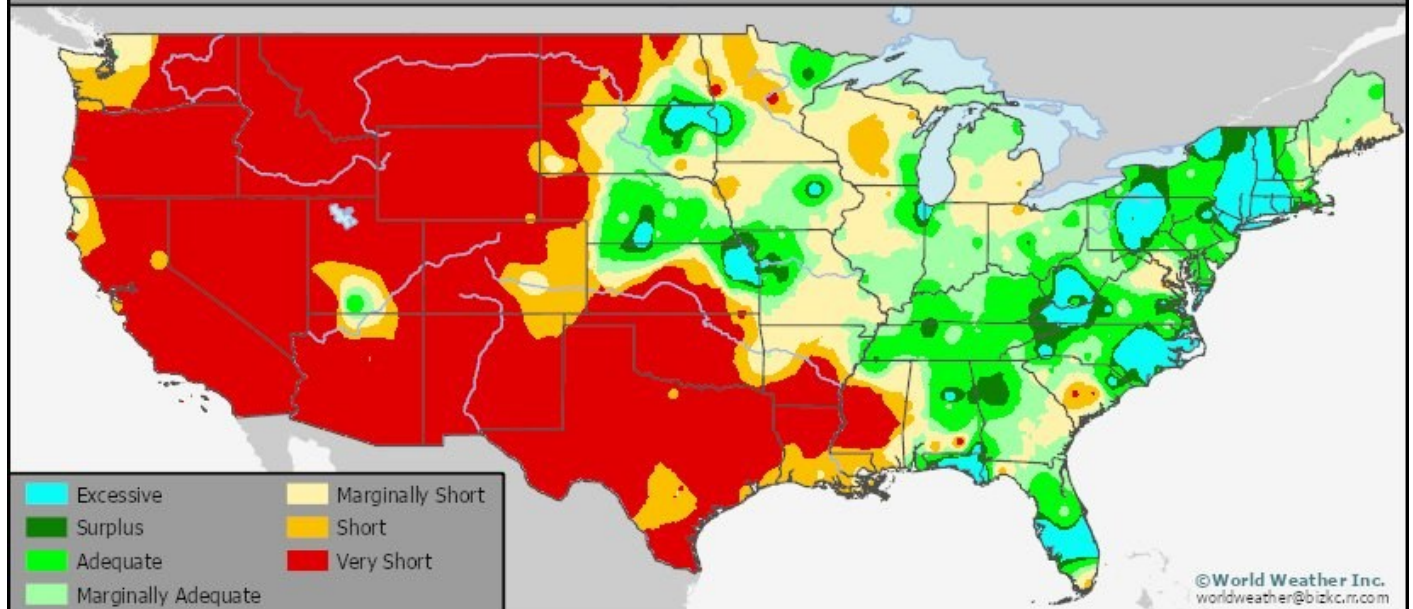


After a slow start to the monsoon season in June, monsoonal disturbances promoted waves of significant rain for much of India outside the southern production areas in July. The rain helped bring overall rainfall closer to normal for the monsoon season, though many areas are still running on deficient rainfall compared to normal for this time of year. Timely rain will continue for the next week before drier than usual weather potentially occurs toward mid-August.



## U.S. Southern Plains, West Too Dry

### Average 7-Day Topsoil Moisture Ending July 31, 2026



Dryness across the Plains has significantly impacted production potentials for summer grains and cotton. Many areas in the western Corn and Soybean Belt have also struggled with dryness in July despite some recent rain. Corn prospects are not as favorable compared to the start of the month and timely rain is needed. Many other areas in the Midwest would also benefit from a shot of rain. Much of the Plains will continue to dry down while the Midwest has a few opportunities for timely rain in the coming weeks.

### Average 7-Day Subsoil Moisture Ending July 31, 2026

