Midwest Ag-Focus Climate Outlook

Main Points

- Some temperature moderation has occurred over the last 30 days except for the far western areas of the region.
- Precipitation has eased some dryness in the eastern areas of the region. Significantly below-average precipitation has dominated the Plains and parts of Iowa and Minnesota.
- Crop conditions continue to worsen gradually, though they are variable. Some areas exhibit very poor crop conditions while many areas maintain good conditions.
- Some delayed development still exists from late planting of various crops, though corn and soybeans have managed to progress fairly well.

Current Conditions

Temperatures have been below average over the last 30 days for much of the central part of the region, while temperatures in the far east have been high and in the west have been well above average. Most of the cooler areas have been slightly below average with some areas up to 2°F below. The western Plains and parts of Iowa and Missouri experienced temperatures of 3°F above average with some local areas even higher. Over the last 30 days, precipitation has helped reduce dryness in the eastern Corn Belt with a few isolated heavy precipitation areas. The Plains, Iowa, and Minnesota, as well as some isolated eastern areas, have continued to be very dry, with large areas below 50% of average precipitation and smaller areas below 25%. Some early- to mid-season drought has been eliminated across southern areas where precipitation exceeded 200% of the average.

Images from High Plains Regional Climate Center (HPRCC), Online Data Services: ACIS Climate Maps. Generated: 8/23/2022.
Impacts

Dry soils and crop stresses continue to be the main impacts affecting the latter part of the growing season. Drier-than-average soils dominate much of the western and central parts of the region. Only a few areas across the south and far north are wetter than average. Cooler temperatures have eased some crop stress but the overall lack of precipitation is causing yield reductions and, in some areas, complete loss. Cutting corn for silage has been reported in parts of southeast South Dakota and northwest Iowa. In some cases, nitrate levels were too high for silage.

Overall, corn and soybean conditions have decreased steadily throughout the growing season due to heat stress and lack of precipitation. Some areas have improved with rainfall, while others have worsened (generally in the west). Sorghum, which is usually relatively drought tolerant, has also been poor this year due to more extensive drought and heat conditions in the Plains.

At this point in the season, soybeans can still regain a little yield if some rains occur. Concerns now turn to soil moisture recharge for the next growing season and some near-surface moisture for winter grain and cover crop establishment.

Development for all crops continues to be behind average despite warmer temperatures but has made up some ground in recent weeks. Also, dryness has led to reduced disease pressure (though some recent moisture in Michigan had encouraged disease outbreaks).

Drought conditions have worsened in the west, while easing somewhat in the east. The northern Plains, which had been very wet early in the season, have recently experienced worsening conditions as drought expanded northward.
The new monthly and seasonal outlooks from the NOAA Climate Prediction Center are influenced by La Niña. They indicate some near-term precipitation in the eastern Corn Belt, but overall the outlooks lean toward dryness for most of the region. They also lean toward higher-than-average temperatures, especially in the Plains. These outlooks transition to a winter with La Niña characteristics in later outlooks. Climatologically, these outlooks suggest a possibility for widespread storm systems and precipitation during the fall.

From a crop standpoint, the outlooks could lead to some
additional agricultural issues. They indicate lower chances for rainfall and more limited soil moisture recovery. Premature crop maturity may occur as crops run out of moisture and crop dry-down may occur more readily. Delayed crop progress should have enough time to reach maturity. If these conditions continue, producers (especially in the western areas of the Midwest and Plains) should be very aware of potential fire conditions during harvest. Producers should also look for target rainfall opportunities as they plan winter and cover crop seeding.

Outlooks provided by the Climate Prediction Center.