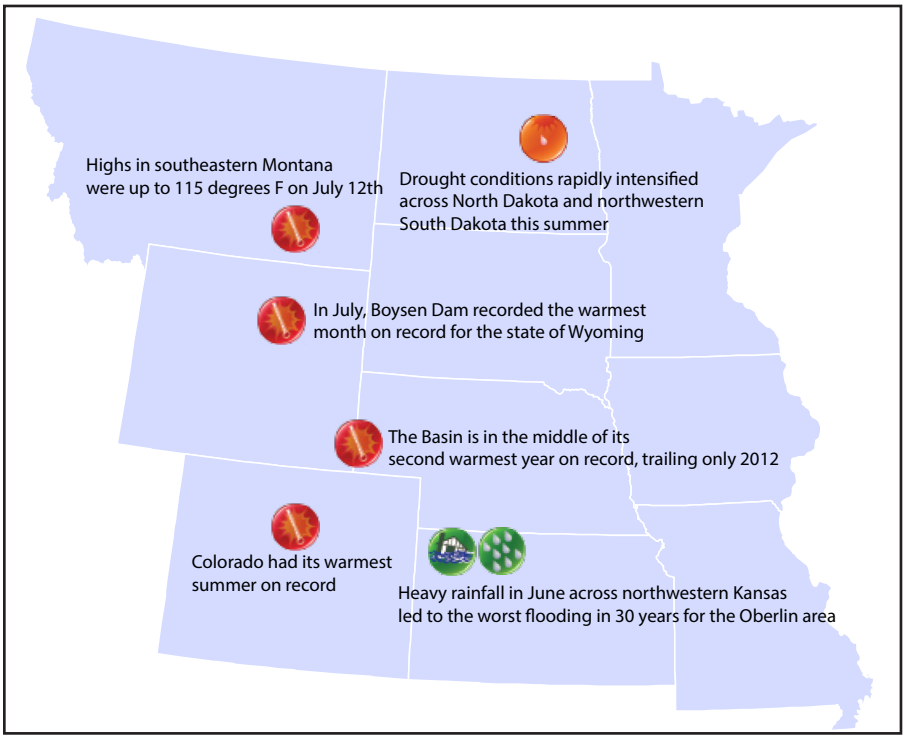
Quarterly Climate Impacts and Outlook

Missouri River Basin

September 2026

Regional – *Significant Events for June - August 2026*



Highlights for the Basin

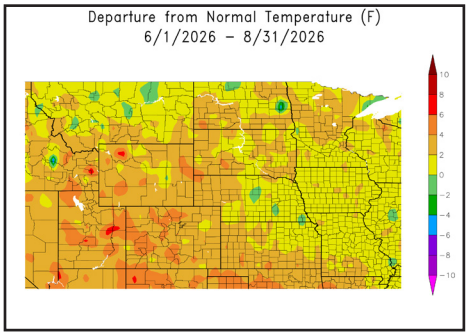
Record heat indices (feels like temperature) on July 25-26 led to unbearable conditions across eastern Kansas and Nebraska. Grand Island and York in Nebraska, for example, reached 123 degrees F while multiple stations were above 115 degrees F on both days. Omaha recorded seven straight hours above 115 degrees F, which was one of the warmest stretches on record for the city.

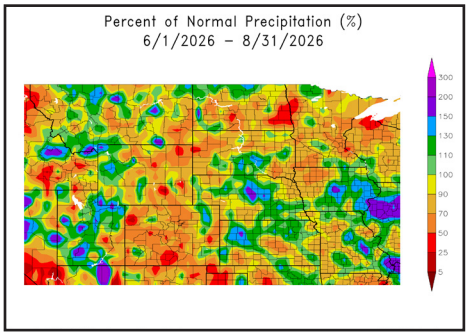
South Dakota would be ravaged by a mini-derecho on June 28-29th, with several wind gusts above 100 mph. Two separate 131-mph gusts would be reported near Highmore in the central part of the state, with widespread damage as shown in the image below. Not only would these be among the strongest thunderstorm gusts in state history, but also in the entire United States.

Regional – *Climate Overview for June - August 2026*

Temperature and Precipitation Anomalies

Departure from Normal Temperature (°F) (left) and Percent of Normal Precipitation (right) for Summer 2026



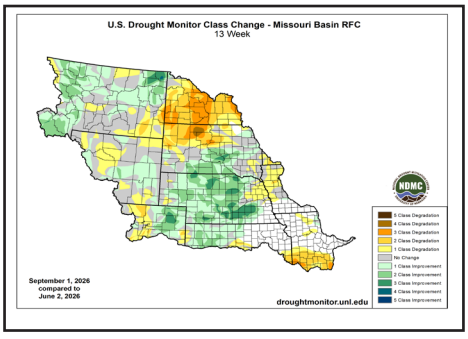


Warmer than normal temperatures continued into the summer months, with the Basin ranking 10th warmest. June was fairly mild, with most of the region near normal. The heat returned in July, with Wyoming recording its warmest month ever by a large margin. Warmer temperatures lingered in the southern portions of the Basin in August, with dozens of counties in the top five warmest for the month.

Drought conditions are much worse this year due to the dryness this summer. June was soggy in Kansas, with 12 counties ranking in the top five wettest. July was on the drier side, with parts of North Dakota recording minimal precipitation. August was among the driest on record for southeastern Kansas and northeastern South Dakota.

Changes in Drought Conditions

June 2 to September 1, 2026



The map above shows the areas of increasing (yellow shading) and decreasing (green shading) categories of drought. Conditions degraded by up to four classes in the Dakotas, driven by the heat and dryness in July. Meanwhile, several bouts of heavy rainfall this summer improved conditions by up to three classes in Nebraska.

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Regional – *Impacts for June - August 2026*

Recreation

Historically low water levels at Lake McConaughy led to all public boat ramps being closed and the submerged town of Old Lemoyne being exposed. Ongoing drought has hampered elk hunting in the western states, while diseases EHD and bluetongue have spread within the deer populations. Outbreaks of these diseases have led South Dakota to cut the number of licenses issued and buy back tags from hunters.

Water Resources

Between the record low snowpack in the spring and less-than-ideal conditions this summer, runoff is projected to be around 60 percent of average. Navigation is expected to be impacted, with a shorter season and lower flows expected. Reservoirs on the North Platte River are in abysmal shape, with Pathfinder Reservoir in Wyoming and Lake McConaughy in Nebraska at near-record lows.

Agriculture

Dry conditions and a late spring freeze took their toll on winter wheat, especially in Kansas and Nebraska, with yields of 33 and 30 bushels per acre, respectively. Normally, yields on average are above 43 bushels an acre. Due to extreme heat and humidity in late July, thousands of cattle died within the basin. Calves are also going to market much earlier this year due to drought and feed concerns.

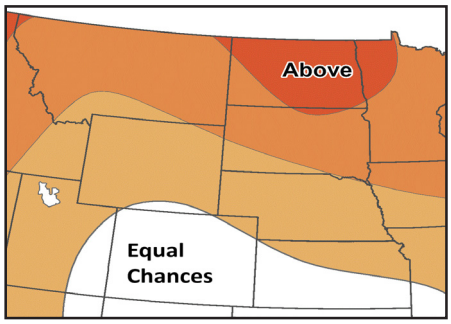

Above: Bent wind turbine near Highmore, South Dakota, credit Laura Edwards (left); Dry pastures (center) and struggling corn (right) in North Dakota, credit Condition Monitoring Reports (CMOR)

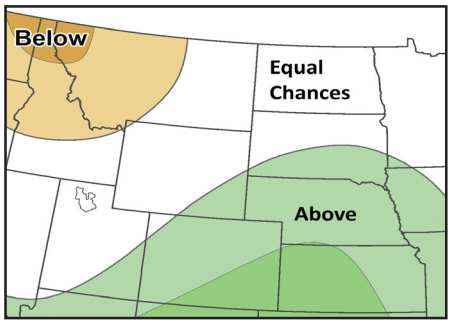
Regional – *Outlook for October - December 2026*

Temperature

Precipitation

Outlooks for October - December 2026





EC: Equal chances of above, near, or below normal

A: Above normal, B: Below normal

According to NOAA's Climate Prediction Center, the outlook for the upcoming season indicates increased chances of above-normal temperatures across the northern portions of the Basin. Increased chances of above-normal precipitation are present across the southern half of the Basin, while western Montana has a slight chance of below-normal. The rest of the basin has equal chances of above, below, or near-normal precipitation.

El Niño will likely strengthen, with high probabilities of a strong event this fall into early next year. Hay yields were poor this summer, leading to high prices and concerns over feeding cattle this winter. Warmer temperatures across the northern Basin could impact recreational activities and infrastructure.

MO River Basin Partners

- High Plains Regional Climate Center
- National Drought Mitigation Center
- National Integrated Drought Information System
- National Centers for Environmental Information
- National Weather Service - Central Region
- NOAA Climate Prediction Center
- NWS Missouri Basin River Forecast Center
- American Association of State Climatologists
- U.S. Army Corps of Engineers
- U.S. Bureau of Reclamation
- USDA Northern Plains Climate Hub
- Bureau of Indian Affairs – Great Plains Region

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