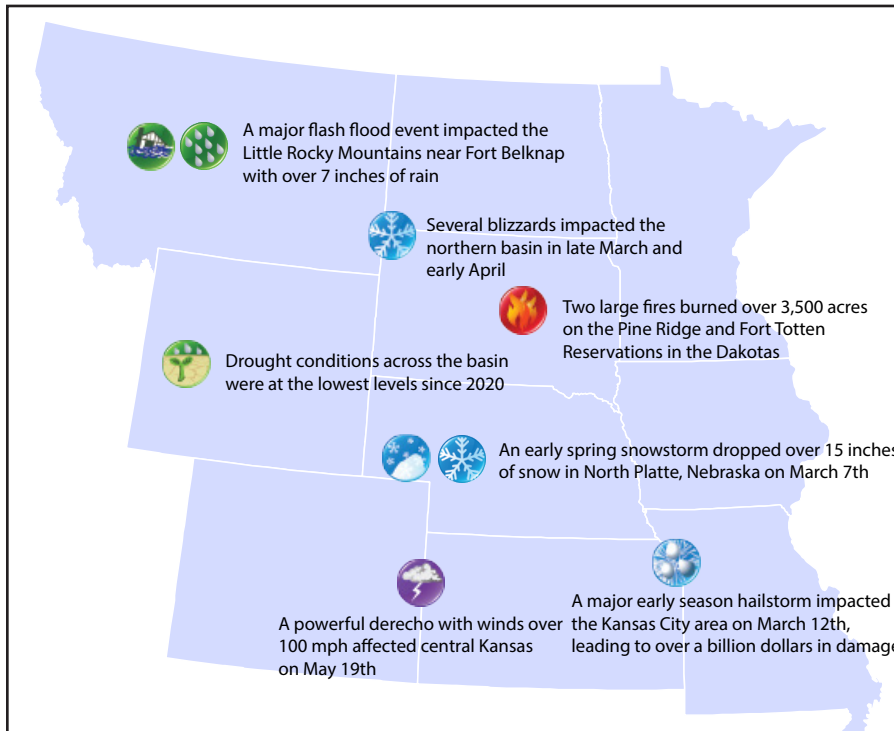




Regional – Significant Events for March - May 2024



Highlights for the Basin

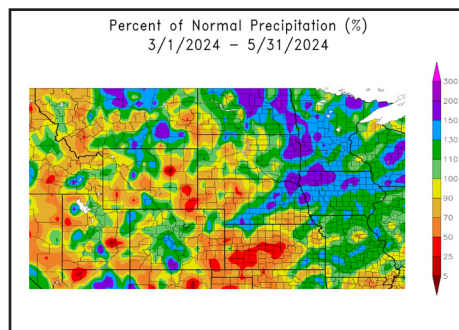
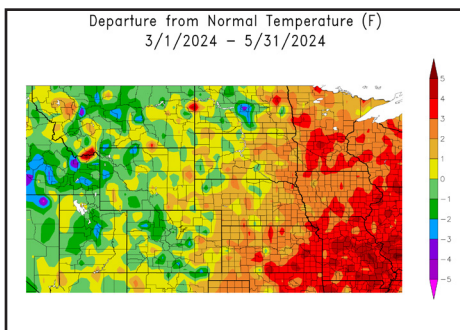
Eastern Nebraska took the brunt of one of the [worst tornado outbreaks](#) to impact the state in years on April 26th. Multiple strong tornadoes touched down, causing several hundred million dollars in damage to parts of Lincoln and Omaha. Despite the catastrophic damage in some areas, no fatalities occurred.

Multiple flood events impacted Kansas, Nebraska, and Montana. Over 13 inches of rain fell between April 26th through the 28th and [flooded](#) Fort Scott, Kansas. A few days later, heavy rainfall in Montana led to [major flooding](#) and destruction of roads and infrastructure. Heavy overnight rainfall on May 21st across [eastern Nebraska](#) flooded parts of Omaha and the surrounding areas.

Regional – Climate Overview for March - May 2024

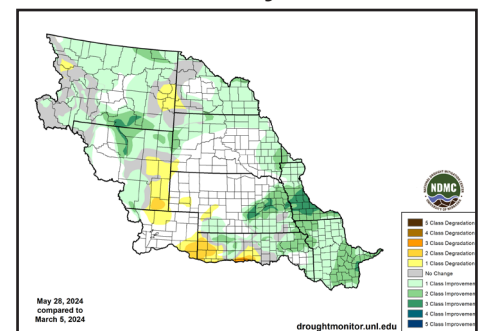
Temperature and Precipitation Anomalies

Departure from Normal Temperature (°F) (left) and Percent of Normal Precipitation (right) for Spring 2024



Changes in

Drought Conditions March 5 - May 28, 2024



Temperatures this spring were above normal for the majority of the Basin. April was warm for the entire region with some places 6 degrees above normal, while March and May were closer to normal. Even with warmer than normal conditions, only a few minor and short-lived heatwaves impacted the Basin this spring.

Typical of springtime, precipitation was scattered across the Basin. May was tremendously wet in eastern Nebraska, with Omaha receiving over 11 inches of rain. Outside of a few storms in May, southwestern Kansas was exceptionally dry. Dodge City recorded its 3rd driest spring, while several surrounding counties ranked driest.

The map above shows the areas of increasing (yellow shading) and decreasing (green shading) categories of drought. Up to 3 classes of improvement occurred in eastern Nebraska, with drought at the lowest levels in nearly three years. Western Kansas once again began to spiral downward after a bone-dry spring, with up to 4 levels of degradation.



Regional – Impacts for March - May 2024

Severe Weather

Severe weather this spring was exceptionally active in the southern Missouri basin. Nebraska had 93 reports of tornadoes through the end of May, nearly double their annual average. Missouri doubled its annual average and is approaching its record, with 92 reported. Westmoreland, Kansas was struck by a tornado on April 30th, which led to the [first tornado fatality](#) in Kansas since February 28, 2012. Despite the [strong tornadoes](#) impacting Omaha and Lincoln, Nebraska on April 26th, only a few relatively minor injuries were reported.



Above: Tornado near Lincoln, Nebraska, credit Gannon Rush (left); Flooding in north-central Montana, credit Rod Benson (center); Creek Side Fire near Wounded Knee, South Dakota, credit Bureau of Indian Affairs (right).

Water Resources

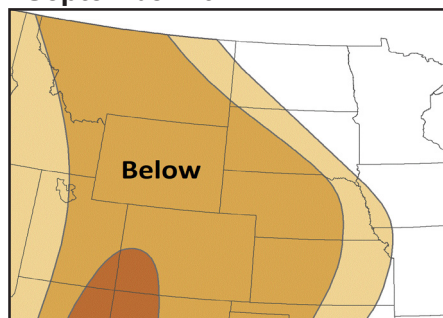
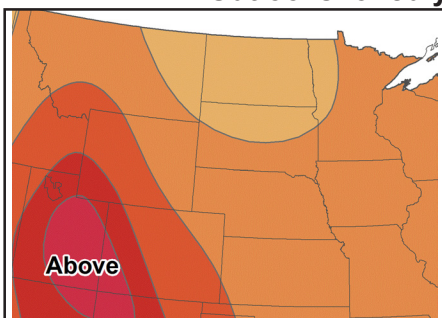
Typical of El Niño, snowfall was lower across the northern Rockies leading to a below-normal mountain snowpack. Inflows to the Missouri River above Fort Peck and Yellowstone combined peaked at lower than 80 percent of normal. As a result of this, the US Army Corps of Engineers projects runoff to be 82% of average. Outside of the event in early May in Montana, mountain snowpack flooding has been limited this year. Due to the heavy rainfall at the end of April, the lower Missouri River flooded for the first time since 2022 across central Missouri.

Regional – Outlook for July - September 2024

Temperature

Precipitation

Outlooks for July - September 2024



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 entire Basin, with western Colorado heavily favored. Increased chances of below-normal precipitation are present throughout the Basin except for northeastern South Dakota and the majority of North Dakota.

La Nina is expected to develop this summer and continue into the winter months. With the potential for warmer temperatures and below-normal precipitation, drought could redevelop and intensify this summer.

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](#)