



Drought Information Statement for Eastern Nebraska and Western Iowa

Valid October 22, 2024

Issued By: NWS Omaha/Valley

Contact Information: nws.omaha@noaa.gov or 1-800-452-9074

- This product will be updated December 1, 2024 or sooner if drought conditions change significantly.
- Please see all currently available products at drought.gov/drought-information-statements
- Please visit weather.gov/Omaha/DroughtInformationStatement for previous statements.
- Please visit drought.gov/drought-status-updates?dews_region=41 for regional drought status updates

- **SEVERE DROUGHT RETURNS TO THE AREA FOR THE FIRST TIME SINCE MAY**
- **DROUGHT CONDITIONS CONTINUE TO DETERIORATE AFTER A HISTORICALLY DRY SEPTEMBER AND OCTOBER 2024**



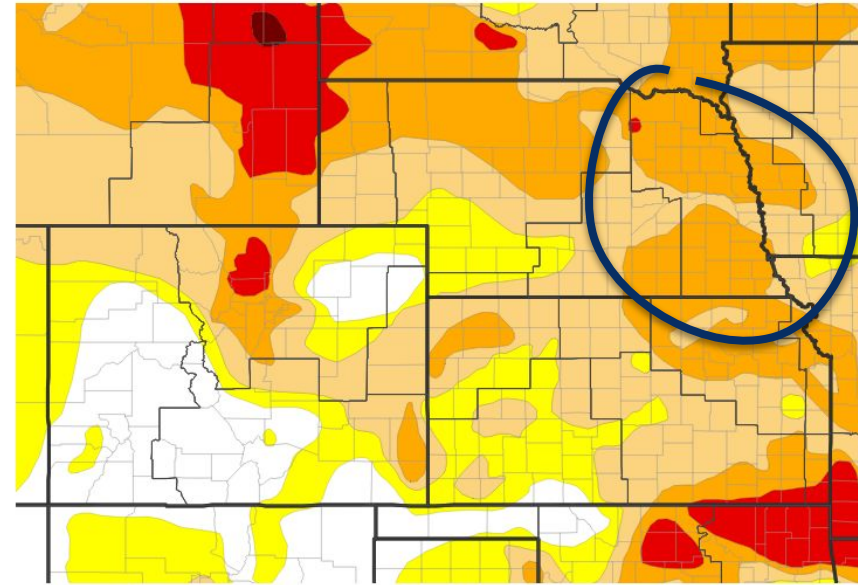


U.S. Drought Monitor

Link to the [latest U.S. Drought Monitor](#)

- The area was drought free in mid-July. Things have deteriorated quickly over the last 100 days.
- Drought intensity and Extent
 - **D4 (Exceptional Drought):** None
 - **D3 (Extreme Drought):** Reintroduced to the area in a small portion of Antelope and Knox counties
 - **D2 (Severe Drought):** The majority of eastern Nebraska and west-central Iowa
 - **D1 (Moderate Drought):** The remainder of eastern Nebraska and the majority of southwestern Iowa.
 - **D0 (Abnormally Dry):** Only eastern portions of Page County Iowa are considered “abnormally dry”. The rest of the area is in some state of drought.

U.S. Drought Monitor



U.S. Drought Monitor



Source(s): NDMC, NOAA, USDA; image courtesy of Drought.gov

Data Valid: 10/22/24



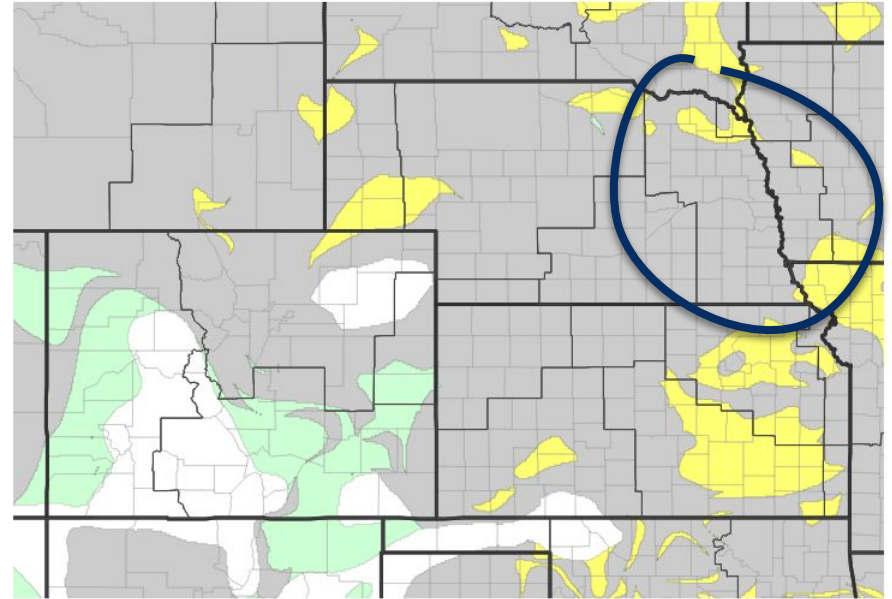


Recent Change in Drought Intensity

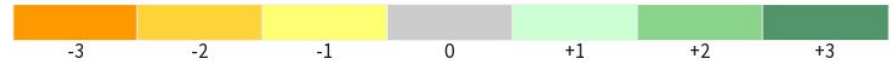
Link to the latest [4-week change map](#)

- One Week Drought Monitor Class Change:
 - **Drought Worsened:** Parts of far northeast Nebraska and southwest Iowa.
 - **No Change:** Most of the area.
 - **Drought Improved:** Colorado was one of the only locations in the entire country that enjoyed improved conditions this week.
- Changes are more pronounced on longer timelines: View the [Change Maps](#)

U.S. Drought Monitor 1-Week Change Map



Drought Change Since Last Week



Source(s): NDMC, NOAA, USDA; image courtesy of Drought.gov

Data Valid: 10/22/24

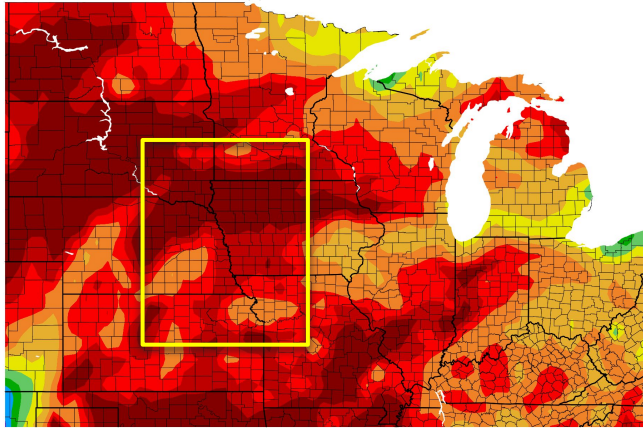




Precipitation

Over the Past 30 Days

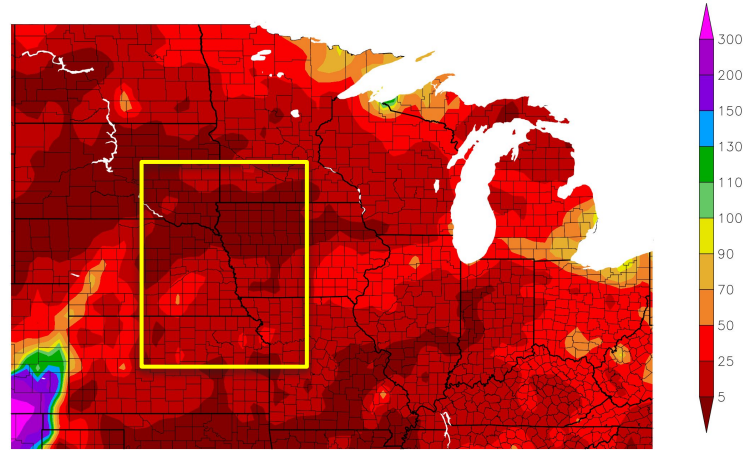
Precipitation (in)
9/29/2024 – 10/28/2024



Generated 10/29/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

Percent of Normal Precipitation (%)
9/29/2024 – 10/28/2024



Generated 10/29/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

- After much of the Northern Plains suffered through the driest September on record, many locations are on pace for a record dry October as well.



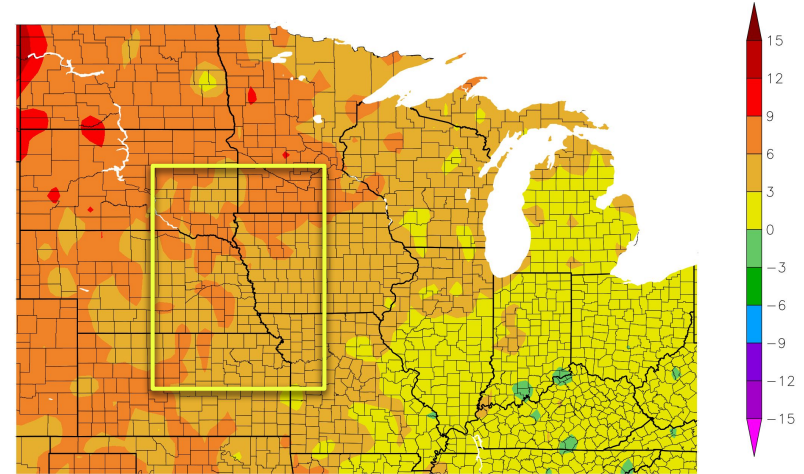


Temperature

Over the Past 30 Days

- To add to our troubles, the very dry conditions have been accompanied by warmer than average temperatures.
- Longer range outlooks lean warmer than normal (more to follow)

Departure from Normal Temperature (F)
9/29/2024 – 10/28/2024



Generated 10/29/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers





Summary of Impacts

Links: See/submit [Condition Monitoring Observer Reports \(CMOR\)](#) and view the [Drought Impacts Reporter](#)

Hydrologic Impacts

- Rainfall in spring and early summer contributed to elevated nitrate concentrations in many of the area's waterways. During dry years, nitrates from soil microbes and farm fertilizers accumulate in fields until it rains and flushes into water sources. (Radiolowa)

Agricultural Impacts

- Due to drought and little grass in their pastures, cattle producers in Palmyra opted to use stored feed and creep feed to sustain the cattle through the fall before weaning. They began feeding hay, hauling water and supplementing first-calf heifers in August, which was much earlier than usual.. (Progressive Farmer)
- Dry pastures forced some ranchers to begin feeding hay in August. (Southwest Iowa News Source)
- Weeks of dry weather accelerated crop maturity and field work. The speedy US corn and soy harvests have strained farmers and storage capacity. As a result, grain is piling up outdoors at some grain elevators. (Reuters)
- Electric fences not working as well during drought. (FarmAndDairy.com)
- Wildfire danger delays harvest in eastern Nebraska (AgUpdate.com)
- Drought conditions have made it hard to plant and maintain young trees planted to replace those destroyed in the 2020 derecho. (KCRG.com)

Fire Hazard Impacts

- A burn ban is in place in 58 of Iowa's ninety-nine counties. (Southwest Iowa News Source)
- Douglas County Nebraska has issued a burn ban. (KETV.com)

Other Impacts

- None

Mitigation Actions

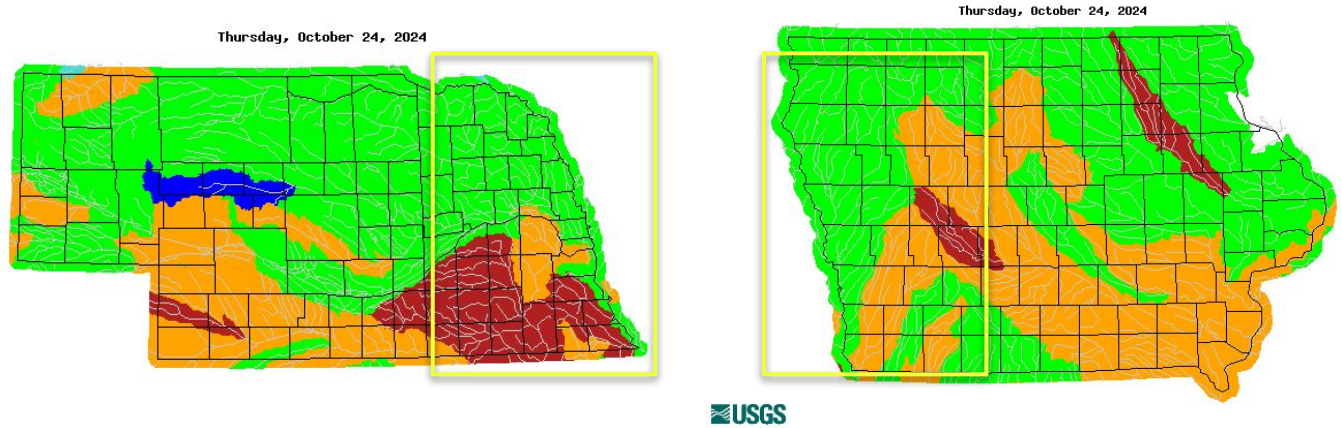
- Shenandoah, IA remains in stage 4 water restrictions. (KCCI.com)





Hydrologic Conditions and Impacts

- Streamflow is closer to normal over the northern half of the area.
- The historically dry weather of September and October has left streamflow slipping below normal after a wet spring.



Explanation - Percentile classes							
Low	<10	10-24	25-75	76-90	>90	High	No Data
	Much below normal	Below normal	Normal	Above normal	Much above normal		

Image Captions:

Left USGS 7 day average streamflow NE HUC map

Right USGS 7 day average streamflow IA HUC map

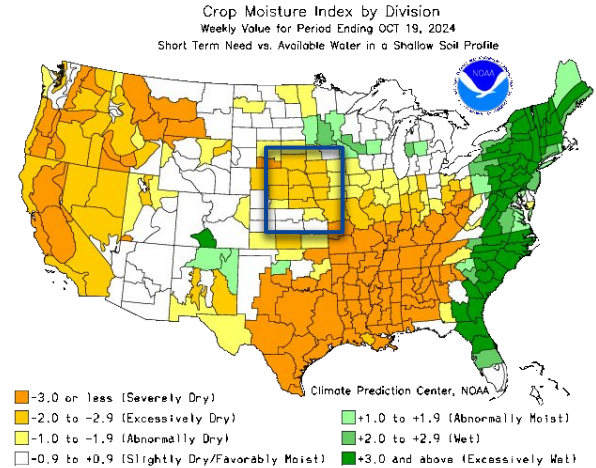
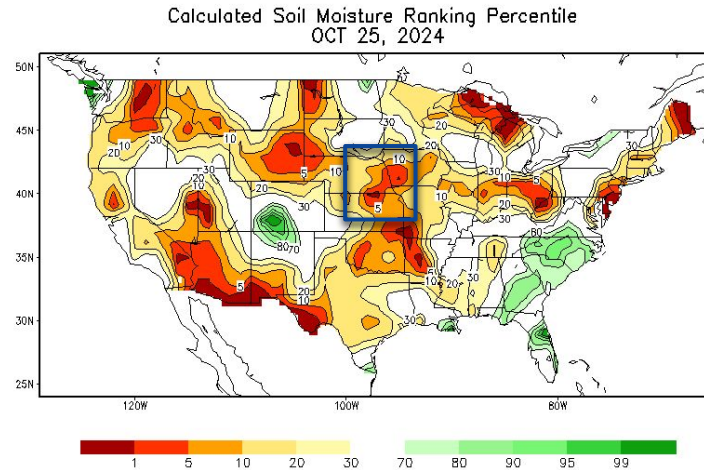




Agricultural Impacts

Link to the Latest [USDA Crop Progress Reports](#) by State

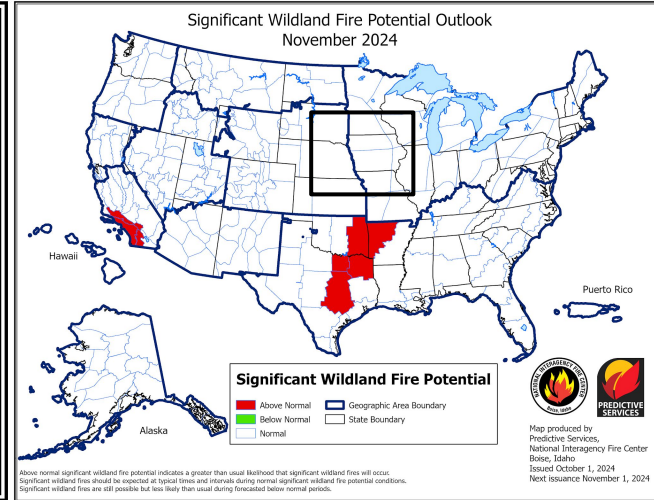
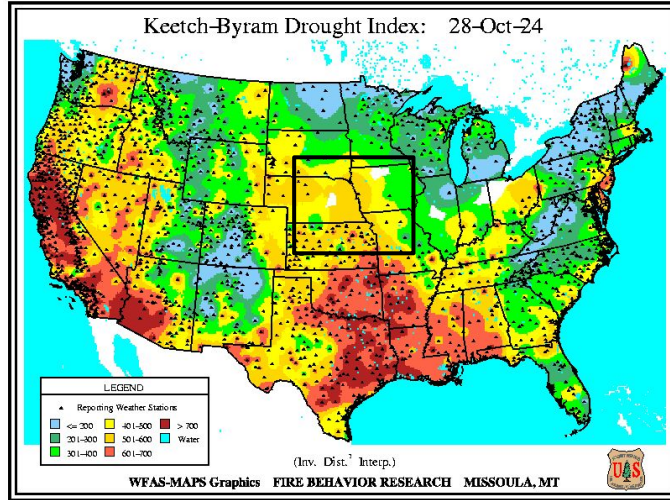
- After vast improvements this spring and summer, soil moisture has plummeted.
- Nationally, the percent of topsoil that is considered short or very short of moisture is 73%. That's the highest value at any point in the past ten years.





Fire Hazard Impacts

- A wet spring and early summer allowed grasses and other plants to grow quickly.
- Those plants have dried quickly and are now viable fuel.
- Already five RED FLAG WARNINGS have been issued by NWS Omaha in October which ties the greatest number ever issued for the month since 2009.

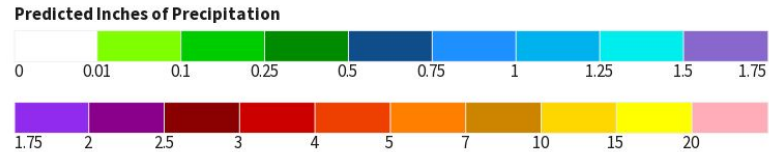
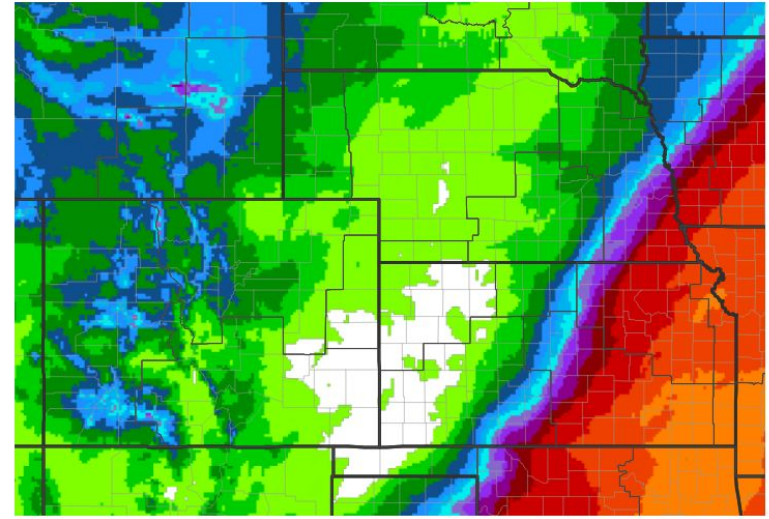




Seven Day Precipitation Forecast

- The map reflect the precipitation forecast for October 29th - November 5th.
- Precipitation may be a story of the Haves and the Have Nots. Areas south of I-80 may see over two inches while areas north of the interstate will be lucky to get ½”.
- Two inches of precipitation brings different impacts depending on the time of year. As we approach the winter months, these rainfall events are increasingly important to get some moisture into the soil before the ground freezes and becomes difficult to penetrate.
- Two inches of rain in a June thunderstorm is relatively common. 2” in November is more than the entire month sees on average.

7-Day Quantitative Precipitation Forecast for October 29, 2024–November 5, 2024



Source(s): National Weather Service Weather Prediction Center; image courtesy of Drought.gov Last Updated: 10/29/24

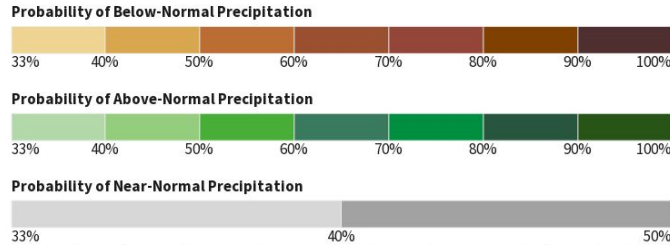
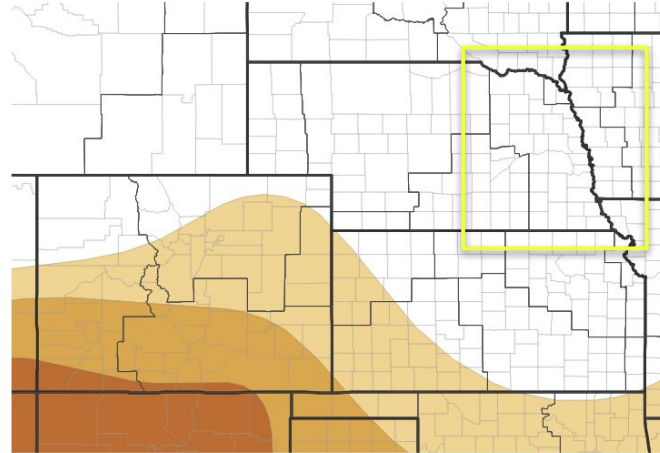


Climate Outlooks

The latest monthly and seasonal outlooks can be found on the [CPC homepage](#)

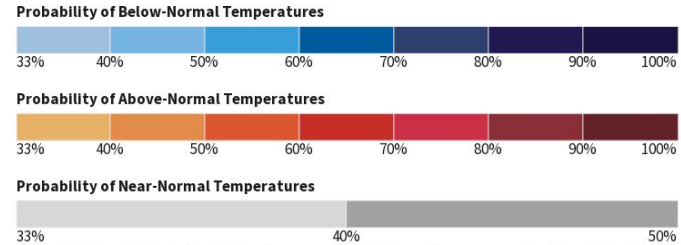
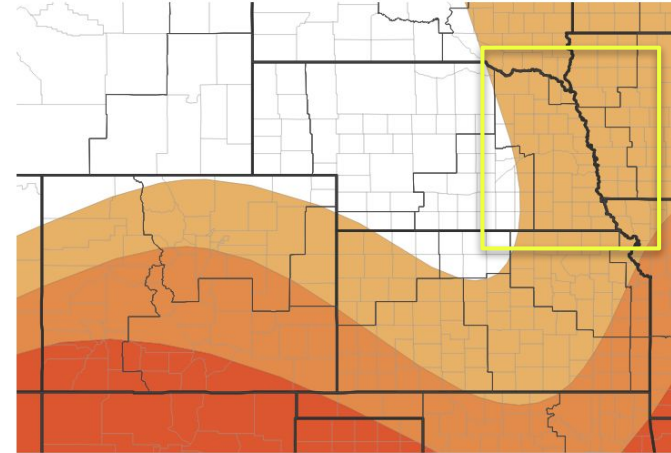
- The temperature outlook for May leans ever so slightly toward warmer than normal conditions across Iowa and eastern Nebraska.
- La Nina conditions are anticipated to develop this winter, but La Nina winters tend to bring little to no signal for our area.
- Wet/dry/warm/cold spells may be dependent on shorter term atmospheric oscillations.

Monthly Precipitation Outlook for November 1, 2024–November 30, 2024



Source(s): Climate Prediction Center; image courtesy of Drought.gov Last Updated: 10/17/24

Monthly Temperature Outlook for November 1, 2024–November 30, 2024



Source(s): Climate Prediction Center; image courtesy of Drought.gov Last Updated: 10/17/24





Drought Outlook

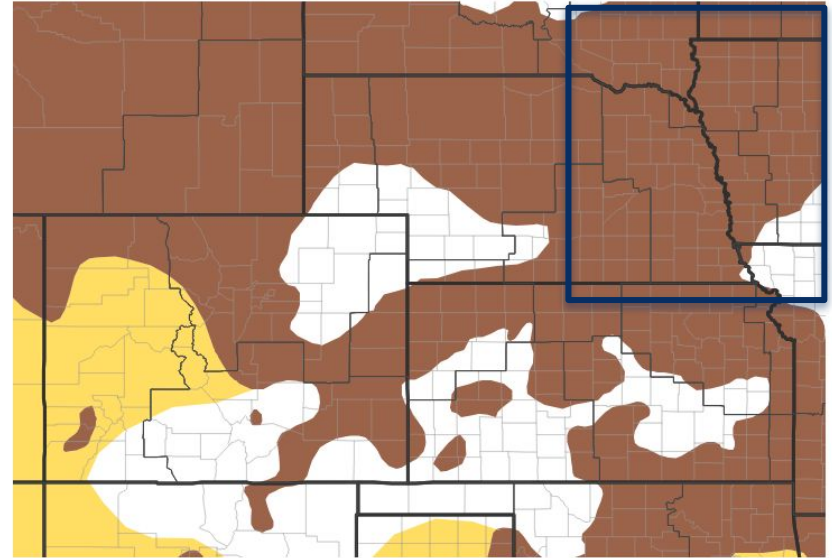
The latest monthly and seasonal outlooks can be found on the [CPC homepage](#)

- The dry season is beginning in the Corn Belt. This is primary reason that it is difficult to shake a drought in the cold season.
- The **3-month drought outlook** calls for drought to remain through at least January for most of the Central Plains.

Link to the latest:

- [Climate Prediction Center Monthly Drought Outlook](#)
- [Climate Prediction Center Seasonal Drought Outlook](#)

Seasonal (3-Month) Drought Outlook for October 17, 2024–January 31, 2025



Drought Is Predicted To...



Source(s): Climate Prediction Center; image courtesy of Drought.gov

Last Updated: 10/17/24

