# Drought Information Statement for Eastern Nebraska and Western Iowa Valid April 1st, 2025

Issued By: NWS Omaha/Valley Contact Information: <u>nws.omaha@noaa.gov</u> or 1-800-452-9074

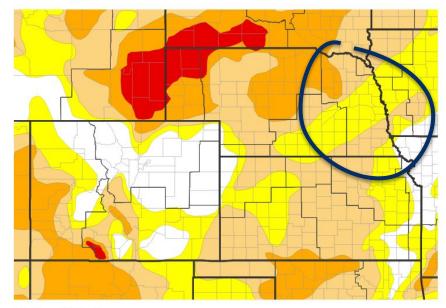
- This product will be updated July 9, 2025 or sooner if drought conditions change significantly.
- Please see all currently available products at <u>drought.gov/drought-information-statements</u>
- Please visit <u>weather.gov/Omaha/DroughtInformationStatement</u> for previous statements.
- Please visit <u>drought.gov/drought-status-updates?dews\_region=41</u> for regional drought status updates
- IMPROVEMENTS CONTINUE AT A SLOW PACE.
- AS THE AREA ENTERS THE WET SEASON, THE DROUGHT MONITOR CAN BE EXPECTED TO SEE CHANGES WITH A GREATER FREQUENCY.



Link to the latest U.S. Drought Monitor

- The area was drought free in mid-July. Things deteriorated quickly through the fall with very little change since late November.
- Drought intensity and Extent
  - D4 (Exceptional Drought): None
  - D3 (Extreme Drought): None
  - D2 (Severe Drought): Severe drought is relegated to northeast Nebraska.
  - **D1 (Moderate Drought)**: Most of the remainder of northeast Nebraska and the bulk of the forecast area south of Interstate 80.
  - **D0 (Abnormally Dry)**: An increasingly large portion of the area is now considered "abnormally dry". This includes a large swath of the forecast area that sweeps from south-central Nebraska to north-central lowa.

#### **U.S. Drought Monitor**



**U.S. Drought Monitor** 

| Abnormally Dry (D0)  | Moderate Drought<br>(D1) | Severe Drought<br>(D2) | Extreme Drought<br>(D3) | Exceptional<br>Drought (D4) |
|--|--------------------------|------------------------|-------------------------|-----------------------------|
| Source(s): NDMC, NOAA, USDA; image courtesy of Drought.gov |                          |                        |                         | Data Valid: 04/01/25        |

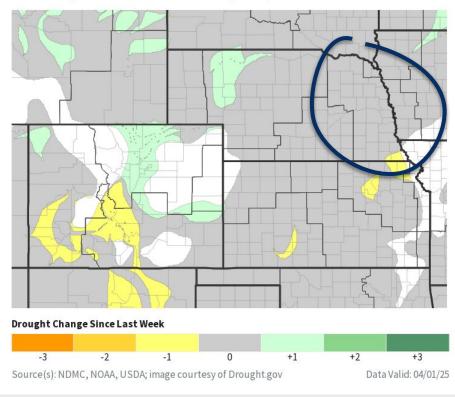


## Recent Change in Drought Intensity

Link to the latest <u>4-week change map</u>

- One Week Drought Monitor Class Change:
  - Drought Worsened: Parts of far northeast Nebraska and southwest lowa.
  - 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 <u>Change Maps</u>

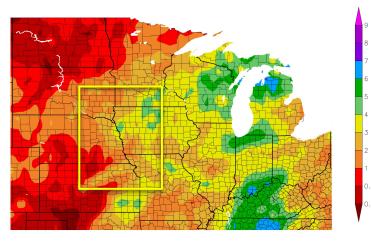
#### U.S. Drought Monitor 1-Week Change Map

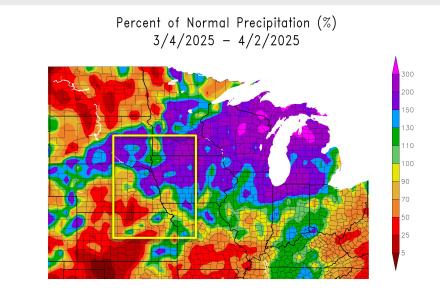






Precipitation (in) 3/4/2025 - 4/2/2025





Generated 4/3/2025 at HPRCC using provisional data.

NOAA Regional Climate Centers

Generated 4/3/2025 at HPRCC using provisional data.

NOAA Regional Climate Centers

- The "snow drought" continued over much of the area through February before March brought regular waves of rain and snow to the area especially north of the Platte River.
- While more rainfall would have been welcomed in southern portions of the area, it was the north that was in greatest need.



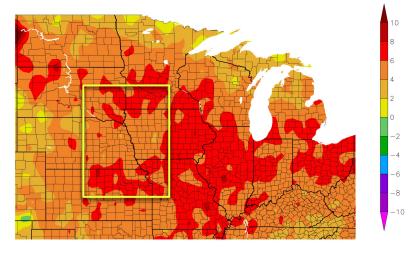
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- Despite widespread snowfall across the area this month (a significant portion of the season's total snowfall for Lincoln and Omaha), the month was warmer than normal.
- Lincoln, Norfolk, and Omaha were all considerably warmer than recent averages over the past thirty days.

|  | Norfolk | Omaha          | Lincoln |  |
|--|---------|----------------|---------|--|
| Average Temperature<br>(March 2025)<br>vs 30 Year Average<br>(1991-2020) | +5.8°   | + <b>4.6</b> ° | +5.8°   |  |

Departure from Normal Temperature (F) 3/4/2025 - 4/2/2025



Generated 4/3/2025 at HPRCC using provisional data.

NOAA Regional Climate Centers



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

## Hydrologic Impacts

• For 2025, runoff in the Missouri River basin above Sioux City is forecast to be 80% of average. This will require release adjustments to provide support for navigation. (usace.army.mil)

## Agricultural Impacts

- Despite the lack of snow, feedlot owners report "wonderful cattle feeding conditions". (agriculture.com)
- Improving drought conditions leave some ranchers considering expanding herds. (NebraskaPublicMedia.org)
- Low water in stock ponds and limited water for livestock and/or irrigation. (weather.gov/MBRFC)

## **Fire Hazard Impacts**

- As of 3/31/25, Douglas County, NE has lifted its burn ban based on improved conditions.
- Iowa has lifted its burn bans (Iowa State Fire Marshal)

## **Other Impacts**

• A new NIDIS-funded study examined the impact of severe drought on respiratory mortality in Iowa. (iopScience.iop.org)

## **Mitigation Actions**

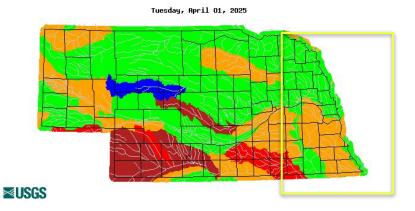
• As of 3/31/25, Shenandoah, IA remains in stage 4 water restrictions. (KMALand.com)

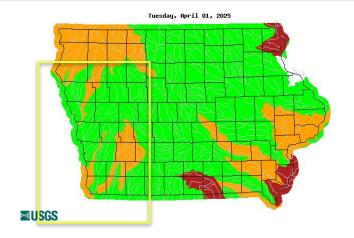


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• While drought conditions have generally improved across the area, streamflow has deteriorated when compared to seasonal norms, especially in the southern half of the area where precip has fallen shy of norms.





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

Image Captions:

Left USGS 7 day average streamflow NE HUC map Right USGS 7 day average streamflow IA HUC map

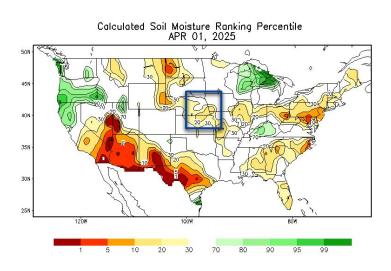


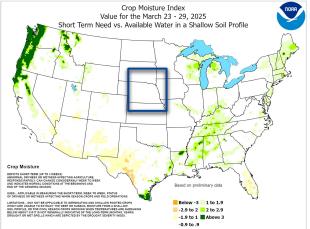
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### Link to the Latest USDA Crop Progress Reports by State

- In a reversal of fortunes, it's now the southern half of the area that has begun to dry out.
- While not dire, soil moisture content is falling behind seasonal norms in areas south of I-80.

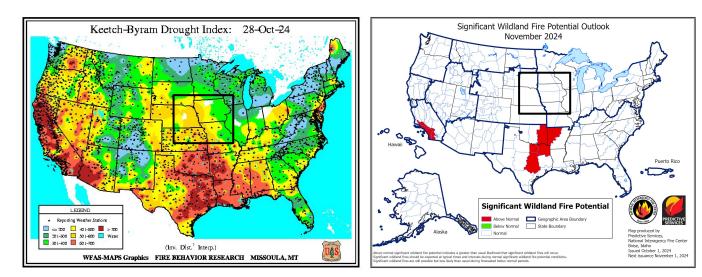








- A wet spring and early summer allowed grasses and other plants to grow quickly.
- Those plants have dried quickly and are now viable fuel.
- Already five RED FLAG WARNINGS have been issued by NWS Omaha in October which ties the greatest number ever issued for the month since 2009.



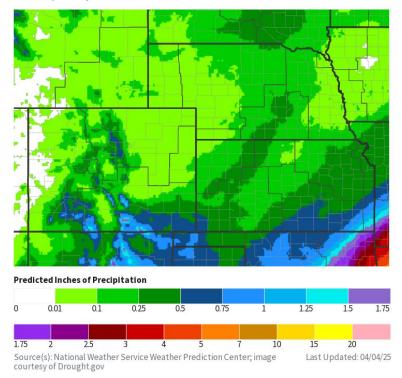


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- The map reflect the precipitation forecast for October 29th - November 5th.
- Precipitation may be a story of the Haves and the Have Nots. Areas south of I-80 may see over two inches while areas north of the interstate will be lucky to get  $\frac{1}{2}$ ".
- 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 April 4, 2025-April 11, 2025

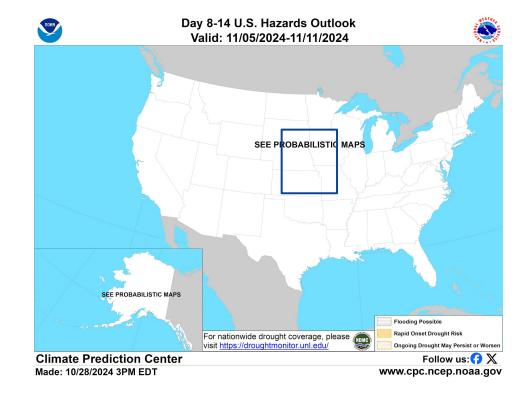


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## Rapid Onset Drought Outlook

Links to the latest Climate Prediction Center 8 to 14 day <u>Temperature Outlook</u> and <u>Precipitation Outlook</u>.

• Rapid onset of drought conditions are not expected.



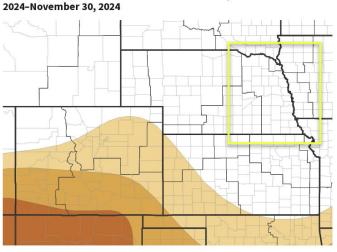
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## **Climate Outlooks**

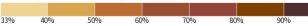
The latest monthly and seasonal outlooks can be found on the CPC homepage

Monthly Precipitation Outlook for November 1,

- The temperature outlook for May leans ever so slightly toward warmer than normal conditions across lowa 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.



#### **Probability of Below-Normal Precipitation**



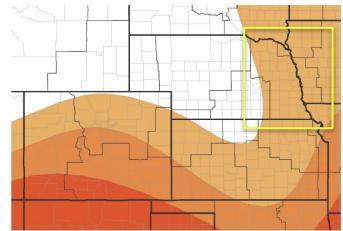
#### **Probability of Above-Normal Precipitation**



#### **Probability of Near-Normal Precipitation**

33% 40% Source(s): Climate Prediction Center; image courtesy of Drought.gov Last Updated: 10/17/2

#### Monthly Temperature Outlook for November 1, 2024-November 30, 2024



#### Probability of Below-Normal Temperatures

100%

50%

|     |     |     |     |     |     |     | Ĩ    |
|-----|-----|-----|-----|-----|-----|-----|------|
| 33% | 40% | 50% | 60% | 70% | 80% | 90% | 100% |

#### **Probability of Above-Normal Temperatures**



#### **Probability of Near-Normal Temperatures**

| %  | 33%                                      | 40%                          | 50%                    |
|----|--|------------------------------|------------------------|
| 24 | Source(s): Climate Prediction Center; in | nage courtesy of Drought.gov | Last Updated: 10/17/24 |

### **National Weather Service Omaha/Valley**, NE



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## **Drought Outlook**

The latest monthly and seasonal outlooks can be found on the CPC homepage

- Improvements to the drought monitor have been welcomed over the past 12 weeks.
- In fact, there are no locations in the OAX CWA that are worse off than they were at the beginning of the year.
- The **3-month drought outlook** calls for drought to remain through at least June for most of the Northern Plains with some development forecast for south-central Nebraska.

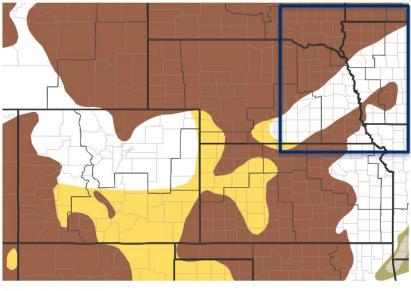
Link to the latest: <u>Climate Prediction Center Monthly Drought Outlook</u> <u>Climate Prediction Center Seasonal Drought Outlook</u>

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Seasonal (3-Month) Drought Outlook for March 31, 2025–June 30, 2025



#### **Drought Is Predicted To...**

| Persist            | Improve                | End                  | Develop | No Drought             |
|--------------------|------------------------|----------------------|---------|------------------------|
| Source(s): Climate | Prediction Center; ima | age courtesy of Drou | ght.gov | Last Updated: 03/31/25 |



If you have questions or comments about this Information, please contact:

### **National Weather Service**

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## Acknowledgments:

The drought monitor is a multi-agency effort involving NOAA's National Weather Service and National Climatic Data Center, the USDA, state and regional center climatologists and the National Drought Mitigation Center. Information for this statement has been gathered from NWS and FAA observation sites, cooperative and volunteer observations, USDAFS, the USDA and USGS. National Weather Service Omaha: weather.gov/Omaha Climate Prediction Center Drought: cpc.ncep.noaa.gov/products/Drought/ US Drought Monitor: droughtmonitor.unl.edu/ National Drought Mitigation Center: https://drought.unl.edu/ National Drought Mitigation Center: https://drought.unl.edu/ National Water Dashboard: dashboard.waterdata.usgs.gov/app/nwd/ National Integrated Drought Information System: drought.gov Current Drought Conditions: drought.gov/current-conditions Past Drought: drought.gov/historical-information USGS Water Watch: waterwatch.usgs.gov US Army Corps of Engineers (USACE): usace.army.mil High Plains Regional Climate Center (HRPCC): hprcc.unl.edu

**Iowa State Climatologist:** Justin Glisan, Ph.D. (515) 281-8981 <u>iowaagriculture.gov/climatology-bureau</u>

Nebraska State Climatologist: Vacant nsco.unl.edu

USDA Crop Information: <u>nass.usda.gov/index.asp</u> Drought Impact Reporter: <u>droughtreporter.unl.edu/map</u>



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