

# Drought Information Statement for Eastern NE and Southwest IA Valid October 20, 2023

## Issued By: NWS Omaha/Valley, NE Contact Information: <u>nws.omaha@noaa.gov</u>

- This product will be updated November 17, 2023 or sooner if drought conditions change significantly.
- Please see all currently available products at <a href="https://drought.gov/drought-information-statements">https://drought.gov/drought-information-statements</a>.
- Please visit <u>https://weather.gov/oax/DroughtInformationStatement</u> for previous statements.





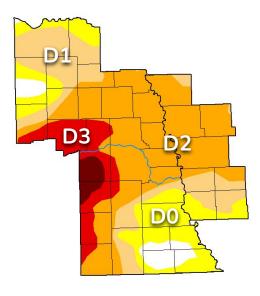
Department of Commerce // National Oceanic and Atmospheric Administration



#### Link to the latest U.S. Drought Monitor

- Drought conditions have improved over much of northeast Nebraska and deteriorated in southeast Nebraska
- Drought intensity and Extent
  - **D4 (Exceptional Drought):** Portions of Butler and Seward.
  - **D3 (Extreme Drought):** Boone, Platte, Colfax, Butler, Saunders, Seward, Lancaster, Saline, Jefferson, Dodge in eastern NE.
  - D2 (Severe Drought): Thurston, Wayne, Madison, Stanton, Cuming, Burt, Boone, Colfax, Dodge, Washington, Saunders, Dodge, Washington, Douglas, Sarpy, Seward, Lancaster, Cass, Saline, Jefferson, and Gage counties in Eastern NE. Monona, Harrison, Shelby, Pottawattamie, Mills and Montgomery in southwest IA.
  - **D1 (Moderate Drought):** Portions of northeast NE, southeast NE, and southwest IA.
  - **D0 (Abnormally Dry):** Portions of northeast NE, southeast NE and far southwest IA.

#### U.S. Drought Monitor Omaha/Valley, NE WFO



#### October 17, 2023 (Released Thursday, Oct. 19, 2023) Valid 8 a.m. EDT

	Drought Conditions (Percent Area)								
	None	D0-D4	D1-D4	D2-D4		D4			
Current	4.62	95.38	76.61	55.76	12.53	2.38			
Last Week 10-10-2023	3.20	96.80	82.15	63.84	21.87	2.38			
3 Month s Ago 07-18-2023	0.00	100.00	93.85	74.96	38.76	4.58			
Start of Calendar Year 01-03-2023	0.00	100.00	99.29	77.57	47.08	24.75			
Start of Water Year 09-26-2023	6.93	93.07	81.14	63.83	21.87	2.38			
One Year Ago 10-18-2022	0.00	100.00	92.73	59.20	40.28	12.46			

Intensity:



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author: Rocky Bilotta NCEI/NOAA



droughtmonitor.unl.edu

Image Caption: U.S. Drought Monitor valid 8am EDT October 17th, 2023



## Recent Change in Drought Intensity

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

- Four Week Drought Monitor Class Change.
  - Drought Worsened: portions of southeast NE and far southwest lowa.
  - **No Change:** A very large area of eastern NE and western IA.
  - Drought Improved: Wide swaths of northeast Nebraska, parts of Monona County, Iowa and Jefferson County in Nebraska.

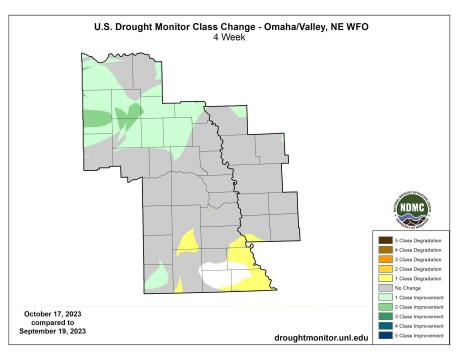


Image Caption: U.S. Drought Monitor 4-week change map valid 8am EDT October 17th.

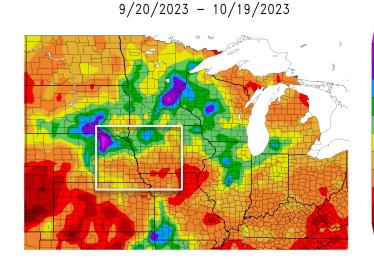
National Weather Service

**Omaha/Valley**, NE





- A tale of two halves: Precipitation across the region over the previous 30 days has been well below normal over the southern half of the area and well above normal over the northern half.
- Precipitation has been 25-50% of normal over most of southern lowa.



Precipitation (in)

Generated 10/20/2023 at HPRCC using provisional data

NOAA Regional Climate Centers 23 at HPRCC using provisional data.

NOAA Regional Climate Center:

200

150

130

110

90

#### Image Captions:

Left - Precipitation Amount for Midwest US Right - Percent of Normal Precipitation for Midwest US Data Courtesy High Plains Regional Climate Center. Data over the past 30 days ending October 19, 2023

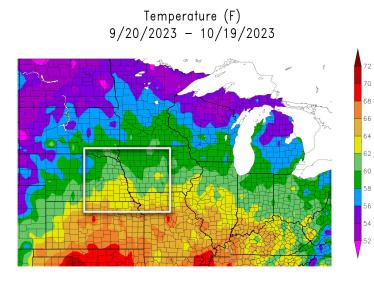
Percent of Normal Precipitation (%)

9/20/2023 - 10/19/2023





• Temperatures over the previous 30 days have been above normal, generally 2 to 6° above normal over the entire area.



Generated 10/20/2023 at HPRCC using provisional data.

NOAA Regional Climate Centers 2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

-6

Image Captions:

Left - Average Temperature Midwest US Right - Departure from Normal Temperature Midwest US Data Courtesy High Plains Regional Climate Center. Data over the past 30 days ending October 19, 2023

Departure from Normal Temperature (F)

9/20/2023 - 10/19/2023





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

### Hydrologic Impacts

• Local streamflow is 10-25% of normal over the southern half of the area. Precipitation deficits for the year are running 4-8" below normal ifor most of the area.

### **Agricultural Impacts**

• Soil moisture remains low in areas south and east of the Omaha metropolitan area.

### Fire Hazard Impacts

• All counties in the area are considered to now have "critical" fuel status. The majority of fuels (dried corn in many cases) will support extreme fire behavior and spread when the weather conditions meet Red Flag criteria.

### **Other Impacts**

• There are no known impacts at this time.

### **Mitigation Actions**

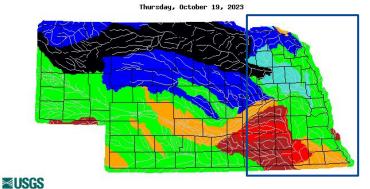
- In October, Shenandoah, IA enacted water restrictions for the first time in 23 years.
- Please refer to your municipality and/or water provider for mitigation information.

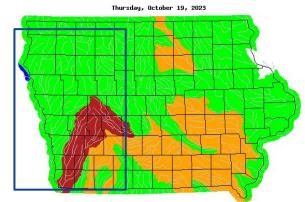


National Oceanic and Atmospheric Administration U.S. Department of Commerce

## Hydrologic Conditions and Impacts

- Streamflow reflects where the precipitation has been falling over the past 30 days.
- Much of northeast Nebraska is flowing above normal.





≊USGS

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 Both valid October 18, 2023

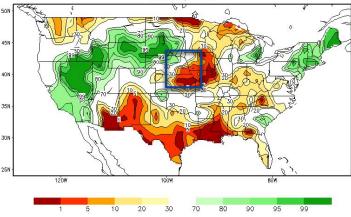


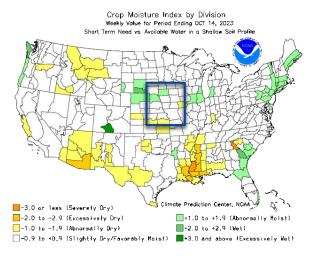


#### Link to the Latest USDA Crop Progress Reports by State

- Soil moisture has improved dramatically in northeast Nebraska.
- Soil moisture continues to run below normal for the remainder of the area.
- The crop moisture index is running Near Normal to Abnormally Moist.

Calculated Soil Moisture Ranking Percentile OCT 19, 2023





#### Image Captions:

Left: CPC Calculated Soil Moisture Ranking Percentile valid September 27, 2023

Right: Crop Moisture Index by Division. Weekly value for period ending October 14, 2023



National Oceanic and Atmospheric Administration

## Seven Day Precipitation Forecast

- We do have a few chances of precipitation in the coming week, with best chances on Tuesday, October 24th.
- Rainfall forecasts in the in the 0.25" expected in our western tier of counties to nearly 2" in far southwestern portions of the area.

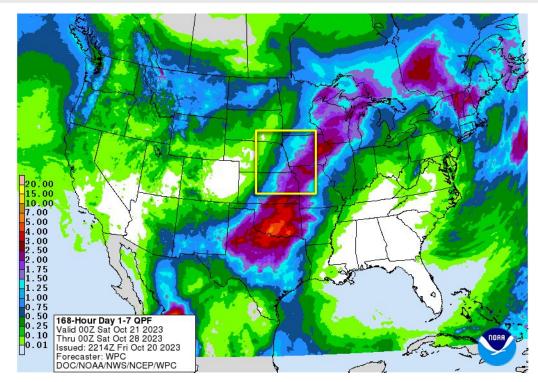


Image Caption: Weather Prediction Center <u>7-day precipitation forecast</u> valid Thursday October 21, 2023 to Wednesday, October 28, 2023



## **Drought Outlook**

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

The drought outlook for late October through January calls for drought to remain, but there could be some improvement in the far southwestern portions of the area.

#### U.S. Seasonal Drought Outlook Valid for October 19, 2023 - January 31, 2024 **Drought Tendency During the Valid Period** Released October 19, 2023 Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4). NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none). Author: Brad Pugh Drought persists NOAA/NWS/NCEP Climate Prediction Center Drought remains, but improves Drought removal likely Drought development likely No drought Puerto Ric https://go.usa.gov/3eZ73

Links to the latest: Climate Prediction Center Monthly Drought Outlook Climate Prediction Center Seasonal Drought Outlook

Image Caption:

Climate Prediction Center Seasonal Drought Outlook Released October 19, 2023, valid October 19 - January 31, 2024



National Oceanic and Atmospheric Administration U.S. Department of Commerce