

Drought Information Statement for Eastern NE and Southwest IA Valid January 9, 2023

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

- This product will be updated February 18, 2024 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/oax/DroughtInformationStatement</u> for previous statements.







Link to the latest U.S. Drought Monitor

- Drought conditions over the past six weeks generally **improved** across the area, especially for eastern Nebraska.
- Drought intensity and Extent
 - D4 (Exceptional Drought): With improvement in Butler County, there is no part of Nebraska considered to be in exceptional drought for the first time in 17 months,
 - **D3 (Extreme Drought):** Pottawattamie and Shelby counties in western Iowa. Seward, Saline, and Jefferson counties in eastern Nebraska.
 - D2 (Severe Drought): Thurston, Burt, Colfax, Dodge, Washington, Saunders, 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):** Most of the remainder of southwest lowa and much of southeast Nebraska.
 - **D0 (Abnormally Dry):** A ribbon of northeast NE, southeast NE and southern Page County, Iowa.



U.S. Drought Monitor

U.S. Drought Monitor

Abnormally Dry (D0)	Moderate Drought	Severe Drought	Extreme Drought	Exceptional
	(D1)	(D2)	(D3)	Drought (D4)
Source(s): NDMC, N	Data Valid: 01/09/24			



Recent Change in Drought Intensity

Link to the latest 4-week change map

- One Week Drought Monitor Class Change.
 - Drought Worsened: None Ο
 - No Change: The bulk of the area Ο
 - **Drought Improved:** Two large swaths Ο of eastern Nebraska
- Drought category adjustments tend to slow in the fall and winter months.
 - Changes are more pronounced on Ο longer timelines: Change Maps

U.S. Drought Monitor 1-Week Change Map





National Oceanic and Atmospheric Administration

Over the Past 30 Days

Precipitation

Precipitation (in) 12/15/2023 - 1/13/2024

Percent of Normal Precipitation (%)12/15/2023 - 1/13/2024 800 400 150 125 100 0.5 0.1

Generated 1/14/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers Generated 1/14/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

• As is the trend in winters with a strong El Nino, we've seen a wetter than normal winter w/ regular bouts of snow. Most of the area has two to three times the normal amount of precip over the past 30 days.



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Temperature

Over the Past 30 Days

Temperature (F) 12/15/2023 - 1/13/2024

Departure from Normal Temperature (F) 12/15/2023 - 1/13/2024



Generated 1/14/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers Generated 1/14/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

• After a particularly warm December (warmest on record globally and in Minnesota), cold air has enveloped the Northern Plains and will linger through the foreseeable future.



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

Hydrologic Impacts

• Near record dry flow is expected this week on the Missouri River near Omaha due to the drought and an ice jam upstream near Ponca, NE.

Agricultural Impacts

• Many Christmas tree farms, including across Iowa and Nebraska reported that drought conditions killed most of the seedlings planted in 2023.

Fire Hazard Impacts

• All counties in the area are considered to now have "critical" fuel status. Thankfully, the state is currently covered in snow.

Other Impacts

- Hundreds of dead deer have been spotted in Southern lowa this winter.
- Experts say the cause is Epizootic Hemorrhagic Disease, or EHD. Conventional wisdom holds that the disease gets more prevalent in years with a drought or a flood

Mitigation Actions

• Please refer to your municipality and/or water provider for mitigation information.



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Hydrologic Conditions and Impacts

- Streamflow reflects where the precipitation has been falling over the past 30 days.
- Much of northeast Nebraska is flowing near normal.
- Fewer Nebraska and lowa rivers are running below normal than had been running low in the past few months.





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





Link to the Latest USDA Crop Progress Reports by State

- Soil moisture remains above normal in northeast Nebraska.
- Soil moisture continues to run below normal for much of the remainder of the area.
- The crop moisture index is running near normal.

Calculated Soil Moisture Ranking Percentile JAN 13, 2024





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- There are small precipitation chances in the forecast in the next 7 days.
- Amounts are forecast to remain below 0.10".
- January and February are the driest two months of the year in eastern Nebraska and western lowa.

7-Day Quantitative Precipitation Forecast





Climate Outlooks

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

- The temperature outlook for January leans toward a colder than normal January and that has played out so far.
- Precipitation is often higher in the winter during strong El Ninos and that, too, has come to fruition in January 2024.



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Drought Outlook

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

- Winter is the typically the driest season of the year in the Corn Belt. Drought category changes typically slow as a result.
- The seasonal 3 month drought outlook calls for drought to persist across much of the region.

Seasonal (3-Month) Drought Outlook



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

Data Valid: 12/21/23

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

Climate Prediction Center Seasonal Drought Outlook

Link to the latest: Climate Prediction Center Monthly Drought Outlook

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