

Drought Information Statement for Eastern NE and Southwest IA Valid March 3, 2024

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

- This product will be updated April 7, 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): None
 - **D3 (Extreme Drought):** No part of Nebraska or western lowa are in the D3 category for the first time since June 2022.
 - D2 (Severe Drought): Platte, Colfax, Washington, Saunders, Douglas, Sarpy, Seward, Lancaster, Cass, Saline, and Jefferson counties in Eastern NE. 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):** Pawnee County and some surrounding land, a ribbon of northeast 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: 02/27/24			



Recent Change in Drought Intensity

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

- One Week Drought Monitor Class Change.
 - Drought Worsened: None
 - No Change: The entire area
 - Drought Improved: None
- Drought category adjustments tend to be slowest in the winter months.
 - Changes are more pronounced on longer timelines: <u>Change Maps</u>





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

Data Valid: 02/27/24



Over the Past 30 Days

Precipitation

Precipitation (in) 2/2/2024 - 3/2/2024

Percent of Normal Precipitation (%) 2/2/2024 - 3/2/2024



Generated 3/3/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers Generated 3/3/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

• After a wetter than normal December and January, February turned dry. Most of the area saw less than 0.5" of moisture when climate normals require nearly double that.



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Temperature

Over the Past 30 Days



Generated 3/3/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers Generated 3/3/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

• After the warmest December on record globally (and here), January was cooler than normal across the country's mid-section. February brought another weather whiplash with much warmer temperatures.



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

Hydrologic Impacts

• The Nebraska Game and Parks Commission said anyone planning to launch boats in Nebraska should beware of low-water levels. Boaters are advised to be patient and cautious when launching and loading boats.

Agricultural Impacts

- An lowa extension entomologist is concerned crops in areas of prolonged drought will be more vulnerable to pests. Pest pressure tends to lead to disease pressure. Farmers should factor that into pest management.
- A buildup of nitrate in farm fields that has likely resulted from Iowa's longest-running drought in 70 years has set the stage for a potentially massive uptick in stream pollution, state water-quality observers say.

Fire Hazard Impacts

• All counties in the area are considered to now have "critical" fuel status. The entire area has been under a few RED FLAG WARNINGS for critical fire danger already this spring.

Other Impacts

- Hundreds of dead deer were 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.
- Although many are below normal, fewer Nebraska and Iowa 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 below normal in southeast Nebraska.
- The wettest soil remains northwest of this part of the country.
- The crop moisture index is running near normal.

Calculated Soil Moisture Ranking Percentile MAR 02, 2024







- All counties in the local 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.
- Red Flag Warnings have already been issued multiple times so far this year.



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- There are meaningful precipitation chances in the forecast in the next seven days.
- Up to 1.75" are possible.
- January and February are the driest two months of the year in eastern Nebraska and western lowa.
- On average, March brings as much moisture as both months combined.

7-Day Quantitative Precipitation Forecast





Climate Outlooks

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

- The temperature outlook for March leans toward warmer than normal conditions across the area.
- Though El Nino is fading, its effects typically linger a bit longer. The precipitation outlook reflects a common El Nino pattern of a wetter than normal winter in Iowa and Nebraska.





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 improve across much of the region with the March improvement most likely in Kansas and nearby Nebraska counties.

Drought Is Predicted To... N/A Persist End Develop Improve

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

Data Valid: 02/29/24

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

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

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