Drought Information Statement for Eastern Nebraska and Western Iowa Valid April 7, 2024

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

- This product will be updated May 5, 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/Omaha/DroughtInformationStatement</u> for previous statements.
- Please visit <u>drought.gov/drought-status-updates?dews_region=41</u> for regional drought status updates
- SEVERE DROUGHT REMAINS IN SOUTHWEST PORTIONS OF THE AREA
- ELSEWHERE ACROSS WESTERN IOWA AND EASTERN NEBRASKA DROUGHT CONDITIONS
 ARE SLOWLY IMPROVING



Link to the latest U.S. Drought Monitor

- Drought conditions have mostly improved over the past six months. Counties near the Missouri state lines have degraded just a bit over this time period.
- Drought intensity and Extent
 - D4 (Exceptional Drought): None
 - D3 (Extreme Drought): None
 - **D2 (Severe Drought)**: Platte, Butler, Seward, Saline, and Jefferson counties in eastern NE.
 - D1 (Moderate Drought): Boone, Platte, Colfax, Butler, Saunders, Washington, Douglas, Sarpy, Lancaster, Cass, Otoe, Jefferson, Gage, Johnson, Nemaha, Richardson in eastern NE. Morrison, Shelby, Pottawatamie, Mills, Montgomery, Fremont, and Page Counties in western lowa.
 - D0 (Abnormally Dry): Gage, Johnson, Pawnee, Nemaha, Richardson, Platte, Colfax, Madison, Stanton, Dodge, Wayne, Cuming, Thurston, Burt, and Washington counties in eastern Nebraska. Monona and Morrison counties in western Iowa.





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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>

U.S. Drought Monitor 1-Week Change Map



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

Data Valid: 04/02/24





30-Day Precipitation Accumulations (Inches)



Source(s): National Weather Service Multi-Radar Multi-Sensor System; image courtesy of Drought.gov

Last Updated: 04/06/24

30-Day Percent of Normal Precipitation



• After a dry February, March grew wetter for western Iowa and northeast Nebraska. The remainder of eastern Nebraska continued to fall short of seasonal moisture.



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

Hydrologic Impacts

• River levels in southeast Nebraska remain below normal.

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 occasional RED FLAG WARNINGS for critical fire danger already this spring.

Other Impacts

• The water in Shenandoah's city wells was about four feet deep, although it's preferable to see at least 10 to 12 feet of water when the pumps are operating. If the water level were to drop to just one foot, the wells would have to be shut down. (KMTV 3 News)

Mitigation Actions

• Irrigation and vehicle washing are not allowed in Shenandoah, IA. (KMTV 3 News)



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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



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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 over the southern two-thirds of the area and abnormally moist north of there.







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- 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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- The map reflect the precipitation forecast for Saturday, April 6th.
- The remainder of the 7 day period shows mostly dry conditions are forecast in the area.
- April marks the beginning of the wettest half of the year in eastern Nebraska and western lowa.





National Weather Service Omaha/Valley, NE



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Climate Outlooks

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

- The temperature outlook for April leans toward warmer than normal conditions across the area and much of the CONUS.
- Though El Nino is fading, its effects typically lag behind the oscillation itself. The precipitation outlook reflects a common El Nino pattern of wetter than normal conditions in lowa 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 1-month drought outlook calls for drought to continue improving across much of the region thanks to the extra precipitation that may fall through the month of April.

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



1-Month Drought Outlook

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

Data Valid: 04/05/24

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limate Prediction Center Seasonal Drought



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