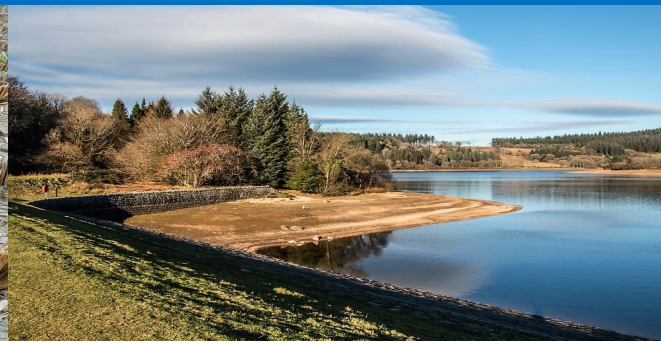
Drought Information Statement for SE SD, SW MN, NW IA, Far NE Neb

Valid November 2nd, 2023

Issued By: WFO Sioux Falls, SD

Contact Information: w-fsd.webmaster@noaa.gov

- Please see all currently available products at https://drought.gov/drought-information-statements.
- Please visit https://www.weather.gov/fsd/DroughtInformationStatement for previous statements.

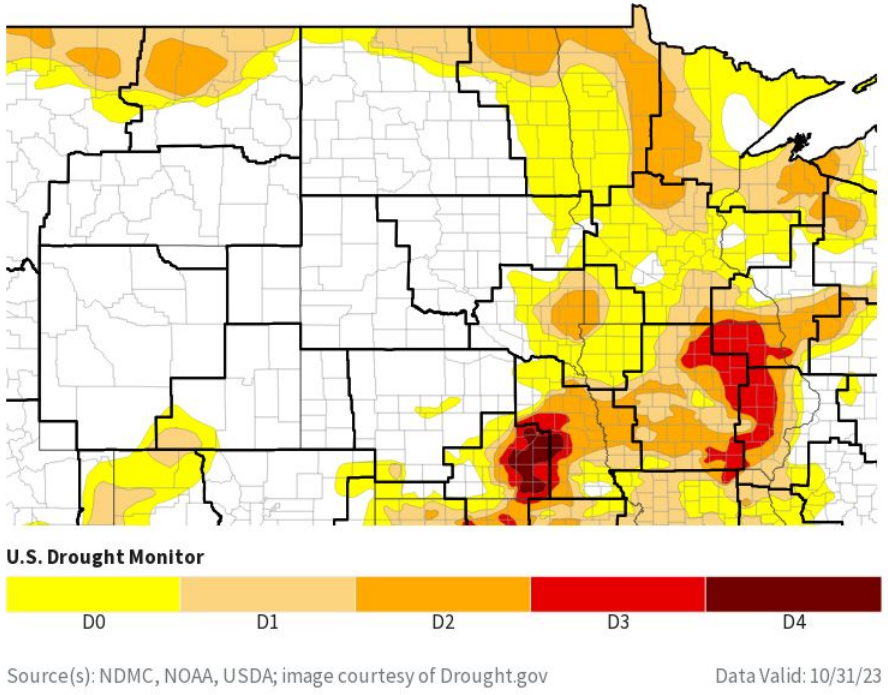


U.S. Drought Monitor.

Link to the latest U.S. Drought Monitor for SE South Dakota, SW Minnesota, NW Iowa, far NE Nebraska

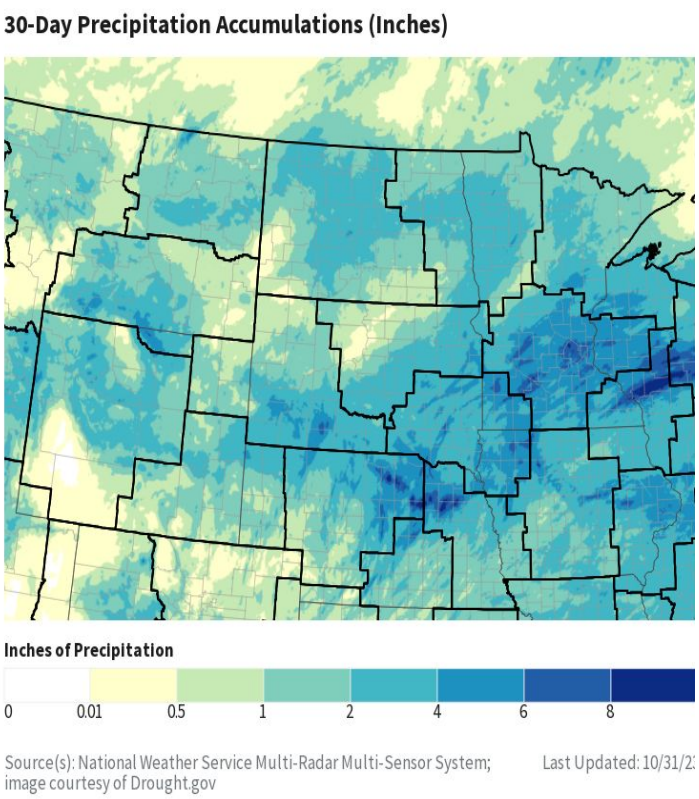
...RECENT RAINFALL HAS HELP BUT DROUGHT REMAINS GIVEN LONG TERM DEFICITS...

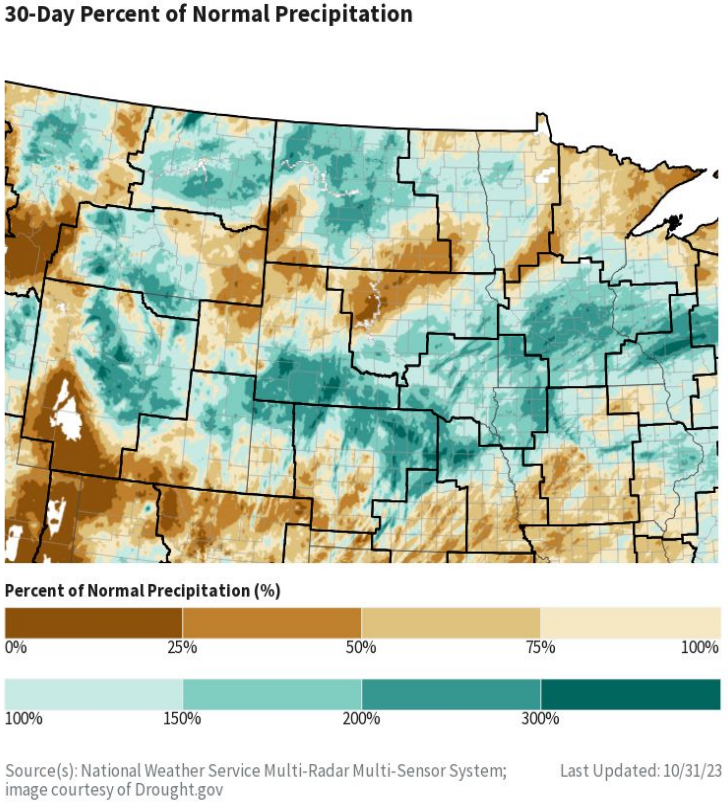
- Drought Intensity and Extent
  - D2 (Severe Drought): Southern Dixon county in northeast Nebraska as well as the I-29 corridor in far eastern South Dakota and adjacent portions of southwest Minnesota.
  - D1 (Moderate Drought) and D0: (Abnormally Dry): The remain portions of the region near and east of the James River not covered by D2 delineation.



Precipitation - Past 30 Days.

- Widespread significant rainfall occurred in mid-October that resulted in most locations picking up 1.5 to as much as 6 inches of rain.
- This was roughly 150-300% of normal for the 30 day period.

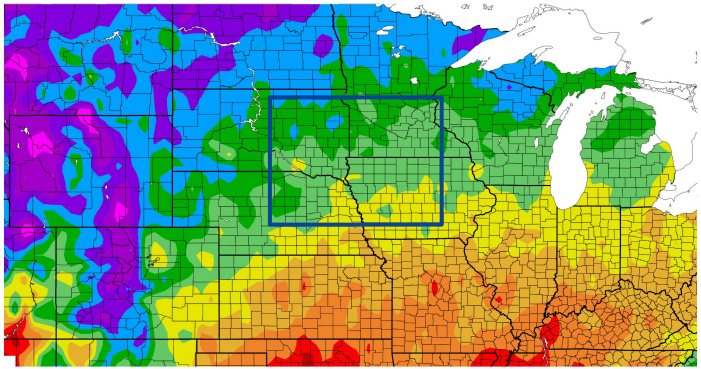




Temperature - Past 30 Days

- Temperatures during this period were above normal for much of October driven by a very warm start to the month. Temperatures fell well below normal to close out the month.

Temperature (F)
10/1/2023 – 10/30/2023

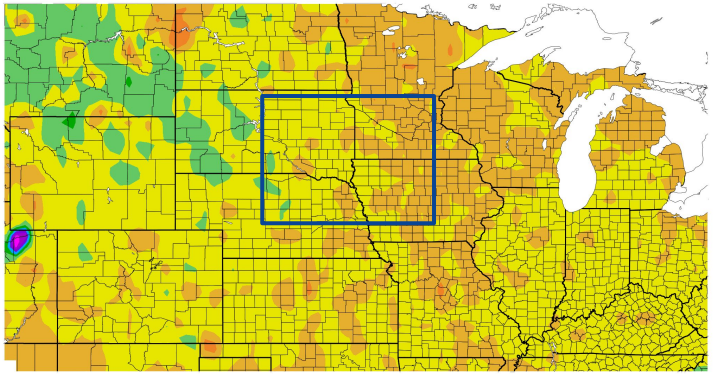


39 42 45 48 51 54 57 60 63 66 69

enerated 10/31/2023 at HPRCC using provisional data.

NOAA Regional Climate Center

Departure from Normal Temperature (F)
10/1/2023 – 10/30/2023



−15 −12 −9 −6 −3 0 3 6 9 12 15

erated 10/31/2023 at HPRCC using provisional data.

NOAA Regional Climate Center

Summary of Impacts.

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

Hydrologic Impacts

- Several streams and rivers continue to run below normal although have improved some given recent rainfall. This is most prevalent through the Big Sioux Basin and basins east into SW MN and NW IA. Groundwater depths also remain deeper than normal and have only showed minimal response to recent rainfall.

Agricultural Impacts

- No recent new impacts not already previously discussed

Fire Hazard Impacts

- No recent new impacts not already previously discussed

Hydrologic Conditions and Impacts

- Several area streams across eastern SD into southwest MN and northwest IA continue to run below normal.
- Groundwater well data east of the James River continues to show steady, but not improving, values.

USGS Streamflow Data:
National Water Dashboard

Groundwater Wells Data:
Renner, SD
Near Huron, SD
Windom, MN

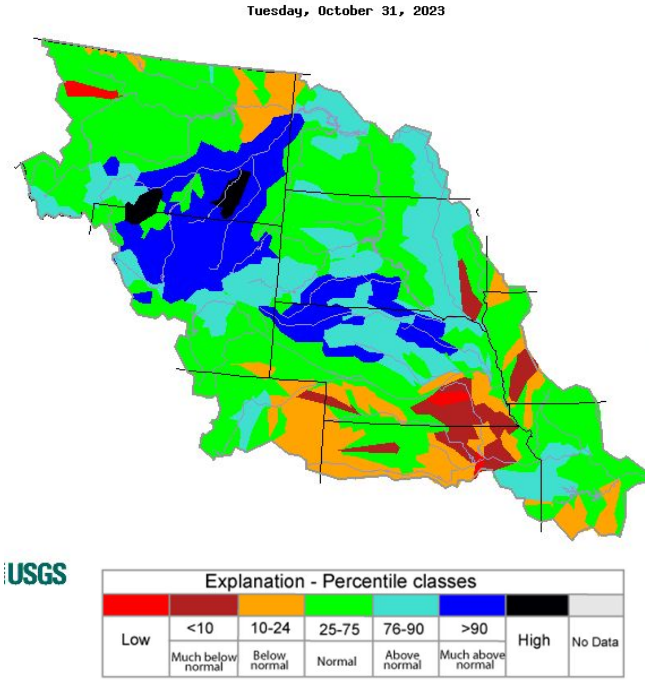


Image Caption: USGS 7 day average streamflow HUC map valid 10/31/2023

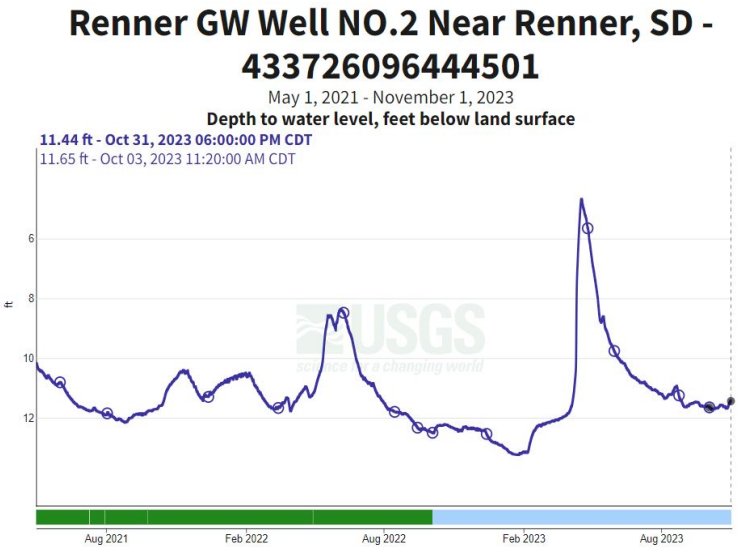


Image Caption: USGS Groundwater Well near Renner, SD

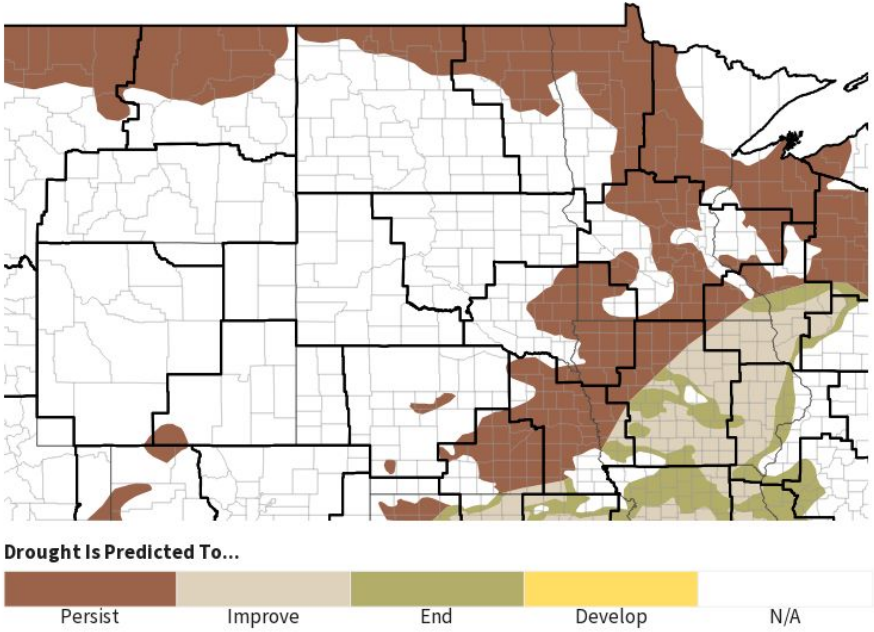
Drought Outlook.

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

- Widespread beneficial rainfall occurred in the past 30 days, which largely went into replenishing the soil moisture supply with minimal runoff into the river and groundwater supply. This allowed for some improvement in drought conditions.

- Despite this rainfall, longer term precipitation deficits are expected to allow drought to persist across portions of eastern South Dakota into southwest Minnesota and northwest Iowa.

Seasonal (3-Month) Drought Outlook



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

Data Valid: 10/19/23

Acknowledgements

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.