



# Drought Information Statement for the Tri-State Area Valid October 04, 2023

### Issued By: WFO Goodland Kansas Contact Information: 785-899-2360, nws.goodland@noaa.gov

- This product will be updated by the 5th of each month or sooner if drought conditions change significantly.
- Please see all currently available products at <u>https://drought.gov/drought-information-statements</u>.
- Please visit https://www.weather.gov/gld/DroughtInformationStatement for previous statements.





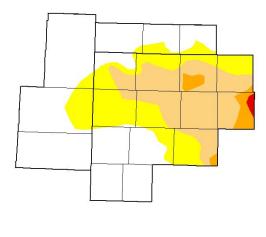
Department of Commerce // National Oceanic and Atmospheric Administration

# Goodland Warning Area Drought Monitor

Link to the latest U.S. Drought Monitor for High Plains

- Drought intensity and Extent
  - D3 (Extreme Drought): Graham County
  - D2 (Severe Drought): Decatur, Gove
  - D1 (Moderate Drought): Cheyenne (KS), Rawlins, Norton, Sheridan, Thomas, Sherman
  - D0: (Abnormally Dry): Red Willow, Hitchcock, Dundy, Yuma, Kit Carson, Logan

#### U.S. Drought Monitor Goodland, KS WFO



#### September 26, 2023 (Released Thursday, Sep. 28, 2023) Valid 8 a.m. EDT

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	52.72	47.28	24.69	3.27	0.40	0.00
Last Week 09-19-2023	59.02	40.98	28.10	3.27	0.40	0.00
3 Month s Ago 06-27-2023	35.68	64.32	45.55	22.95	6.90	0.90
Start of Calendar Year 01-03-2023	0.00	100.00	100.00	77.86	57.73	24.05
Start of Water Year 09-27-2022	0.00	100.00	89.91	71.99	50.05	10.13
One Year Ago	0.00	100.00	89.91	71.99	50.05	10.13



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: Richard Heim NCEI/NOAA



Image Caption: U.S. Drought Monitor for High Plains. Valid 6am MDT April 6th





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

- Four Week Drought Monitor Class Change.
  - Drought Worsened: southern portions of Cheyenne (KS), Sherman, Thomas and eastern Kit Carson counties
  - No Change: majority of the eastern part of the forecast area.
  - Drought Improved: Red Willow, Hitchcock, Norton, Decatur, Wichita counties

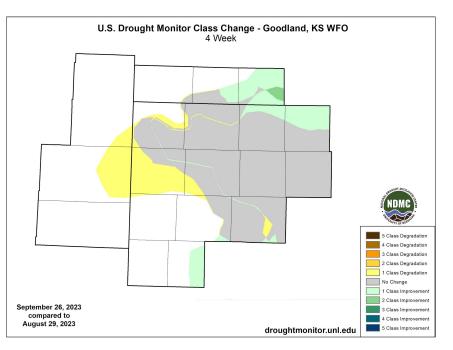


Image Caption: U.S. Drought Monitor 4-week change map valid. **6m MDT September 28th.** 

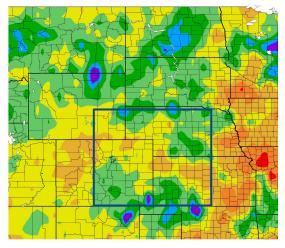




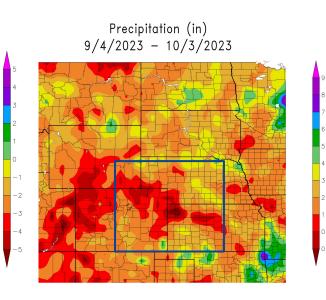
# **Precipitation-** Past 30 Days

- An overall dry September occurred for the majority of the High Plains.
- Portions of the southern area however did see above normal precipitation.

Departure from Normal Precipitation (in) 9/4/2023 - 10/3/2023



Generated 10/4/2023 at HPRCC using provisional data.



NOAA Regional Climate Centers 23 at HPRCC using provisional data.

NOAA Regional Climate Ce

#### Image Captions:

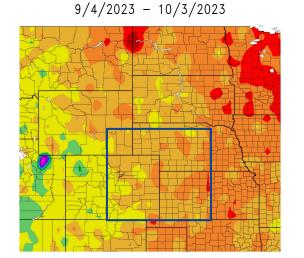
Right - Precipitation Amount for Tri-State Area Left - Percent of Normal Precipitation for Tri-State Area Data Courtesy High Plains Regional Climate Center. Data over the past 30 days ending October, 03, 2023





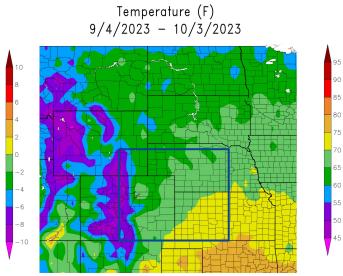
## Temperature- Past 30 Days

- Above normal temperatures were observed across the entire area.
- This along with the above normal temperatures lead to some of the recent degradations of the drought across the western portions of the area.



Departure from Normal Temperature (F)

Generated 10/4/2023 at HPRCC using provisional data.



NOAA Regional Climate Centers <sup>323</sup> at HPRCC using provisional data.

NOAA Regional Climate Centers

Image Captions: Right - Average Temperature Left - Departure from Normal Temperature Data Courtesy High Plains Regional Climate Center. Data over the past 30 days ending October, 03, 2023





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

### Hydrologic Impacts

• There are no known impacts at this time

### **Agricultural Impacts**

• The Kansas Agricultural Statistics Service reports, for the entire state, the topsoil conditions were rated 33% Very Short, 39% Short, 28% Adequate and 0% Surplus. Subsoil moisture supplies rated 37% very short, 39% short, 24% Adequate and 0% Surplus.

### Fire Hazard Impacts

• Fire conditions may increase as we approach our first freeze as fuels succumb to the cold weather as the fall is usually our windiest season.

### **Mitigation Actions**

• Be aware if using sparks on the windiest days and be aware of burn bans.



# Hydrologic Conditions and Impacts

- River gauges across the area indicated flows from near normal to below normal level.
  - The highest were over the eastern portion of the area.

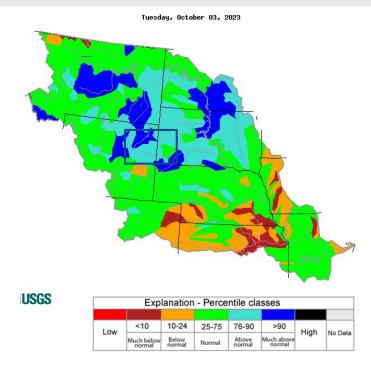


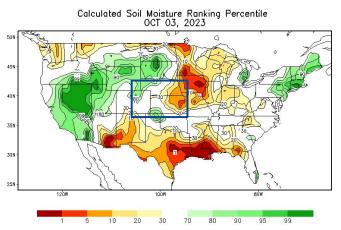
Image Caption: USGS 7 day average streamflow HUC map valid 10 03 2023





### **Agricultural Impacts**

 Soil moisture index and and soil moisture index are near normal to below normal across the area which is representative of the above normal temperatures and lack of rainfall that was observed across the area.



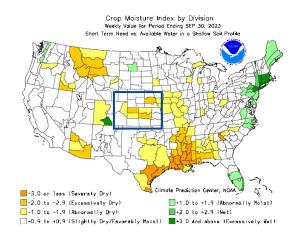


Image Captions:

Left: CPC Calculated <u>Soil Moisture Ranking</u> <u>Percentile</u> valid October 03, 2023 Right: <u>Crop Moisture Index by Division</u>. Weekly value for period ending September 30, 2023





# Fire Hazard Impacts

Link to Wildfire Potential Outlooks from the National Interagency Coordination Center.

 The area is not currently outlook by the Fire Potential Outlook but will be watching for the areas first freezing and fuels to start becoming more favorable.

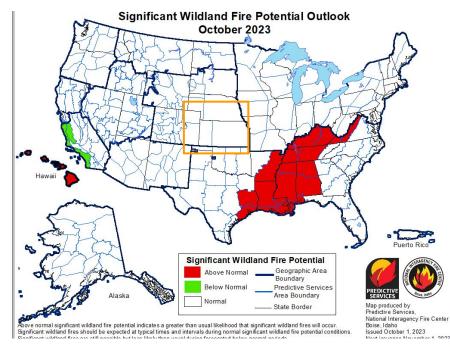


Image Caption: <u>Significant Wildland Fire</u> <u>Potential Monthly Outlook</u> for **October**, **2023** 





• Little to no precipitation is currently expected at this time across the Tri-State area through at least the middle of October.

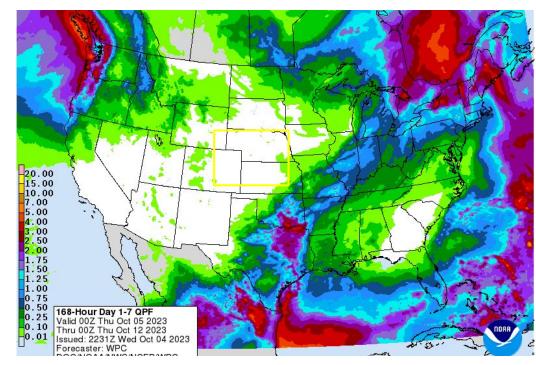


Image Caption: Weather Prediction Center <u>7-day precipitation forecast</u> valid Wednesday October 4 to Wednesday October 11



Long-Range Outlooks

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

- For the month of October as a whole there is fairly strong signal is seeing Above Normal Temperatures and Above Normal Precipitation across the area.
- The relative drier start to the month may mean some potential pattern changes later on.

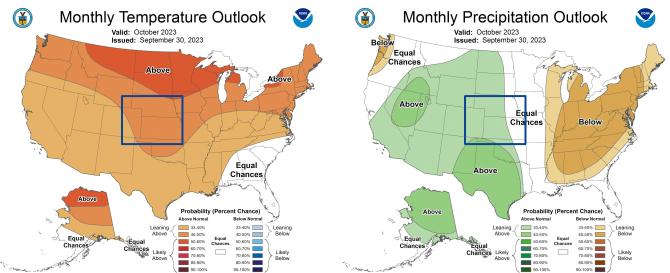


Image Captions:

Left - <u>Climate Prediction Center Monthly Temperature Outlook.</u> Right - <u>Climate Prediction Center Monthly Precipitation Outlook.</u> Valid 10 2023



# Drought Outlook

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

• The overall drought is currently forecasted to end or remain the same for where it does currently remain.

U.S. Monthly Drought Outlook Valid for October 2023 **Drought Tendency During the Valid Period** Released September 30, 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: Yun Fan Drought persists NOAA/NWS/NCEP Climate Prediction Center Drought remains, but improves Drought removal likely Drought development likely No drought Puerto Rice https://go.usa.gov/3eZGd

#### Image Caption:

Climate Prediction Center Monthly Drought Outlook Released 09 30, 2023 valid for 10 2023

National Weather Service Goodland

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



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