

# **Drought Information Statement for** Tri-State Area

Valid October, 03, 2024

Issued By: NWS Goodland, Kansas

Contact Information: 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 <a href="https://drought.gov/drought-information-statements">https://drought.gov/drought-information-statements</a>.
- Please visit https://www.weather.gov/GLD/DroughtInformationStatement for previous statements.
- Please visit https://www.drought.gov/drought-status-updates for regional drought status updates.
- Drought continues to worsen across the area.
- Warm and dry conditions look to continue for the foreseeable future.







Link to the <u>latest U.S. Drought Monitor</u> for High Plains

Drought intensity and Extent

D2 (Severe Drought): Sherman, Thomas, Sheridan, Cheyenne (CO), Wallace

D1 (Moderate Drought): Cheyenne (KS), Rawlins, Decatur, Norton, Graham, Logan, Kit Carson

D0: Yuma, Dundy, Hitchcock, Red Willow, Wichita, Greeley, Gove.

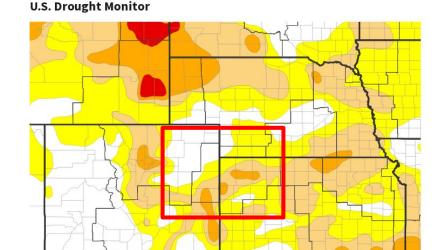




Image Caption: Goodland County Warning Area Drought Monitor. Valid 6am MDT Oct 03, 2024

**U.S. Drought Monitor** 



## Recent Change in Drought Intensity

Link to the latest 4-week change map for CONUS

4 Week Drought Monitor Class Change.

Drought Worsened: Red Willow, Dundy, Hitchcock, Kit Carson, Cheyenne (CO), Sherman, Wallace

No Change: Gove, Wichita, Greeley, Graham, Logan, Sheridan, Thomas, Norton, Decatur, Rawlins, Cheyenne (KS), Yuma.

Improvement: Localized areas from mid September rainfall nothing significant and could be from reorientations of the drought monitor areas.

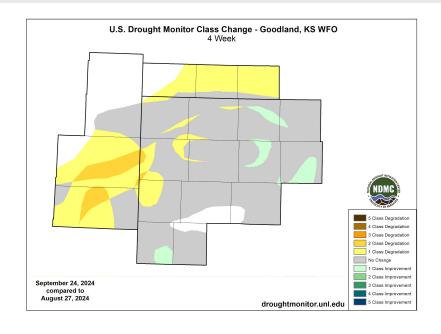


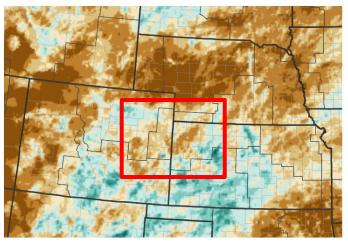
Image Caption: U.S. Drought Monitor 4-week change map valid 6am MDT Oct 03, 2024

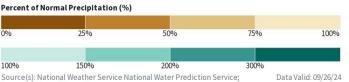


# Precipitation

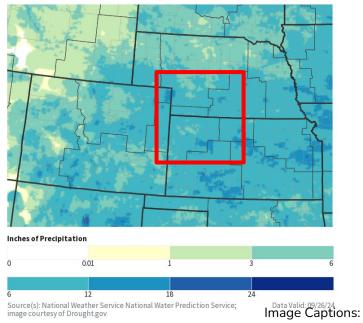
- September in general was a dry month across the area with the majority of the area seeing below normal precipitation.
- Localized area of above normal precipitation was observed in the east due to a mid September rain.

#### 30-Day Precipitation: Percent of PRISM Normal





#### NWPS 90-Day Precipitation Accumulations (inches)



Right - Monthly Precipitation Amount for Tri-State Area Left - Percent of Normal Monthly Precipitation for Tri-State Area Data Courtesy of National Water Prediction Center. Date Valid:

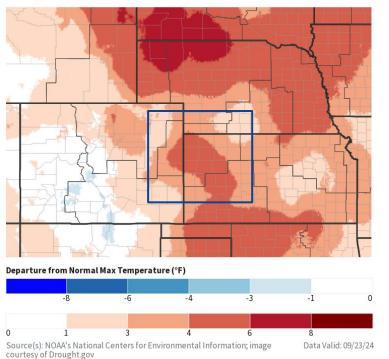
Oct 03 2024



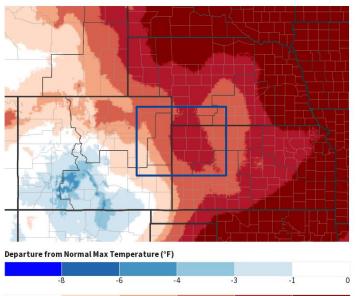
# **Temperature**

- Above normal temperatures were the story across the good majority of the Plains not just the Tri-State area for the past month.
- The warm conditions and the lack of precipitation is part of the main drivers in the worsening drought conditions.

#### **30-Day Temperature Anomaly**



#### 7-Day Temperature Anomaly



Source(s): NOAA's National Centers for Environmental Information; image **Image Captions:** 

Data Valid: 09/23/24

Right - 7 Day Temperature Anomaly Left - 30 Day Temperature Anomaly

Data Courtesy High Plains Regional Climate Center. Date Valid:

Oct 03 2024



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**

- USDA Nebraska Crop Progress and Condition Reports can be found <a href="here">here</a>
- USDA Kansas Crop Progress and Condition Reports can be found here

### **Fire Hazard Impacts**

 Continued lack of rainfall and above normal temperatures and continued worsening drought conditions will continue to bring increasing fire spread concerns as fuels rapidly dry ahead of the first fall freeze.

### **Other Impacts**

There are no known impacts at this time

### **Mitigation Actions**

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





## Hydrologic Conditions and Impacts

 No know impacts at this time as much of the Tri-State Area remains normal or below normal.

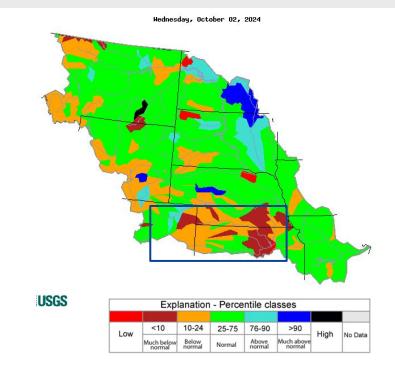
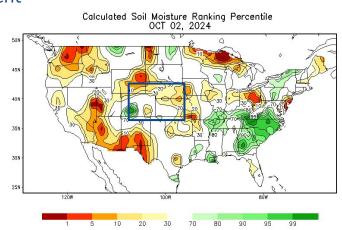


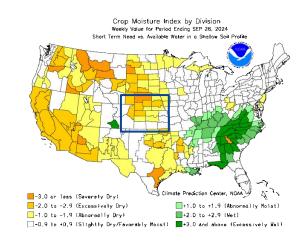
Image Caption: USGS 7 day average streamflow HUC map valid Oct 03 2024





 Soil moisture remains dry for most of the area; however with the recent rainfall could see this improving.





#### Image Captions:

Left: CPC Calculated <u>Soil Moisture Ranking Percentile</u> valid Oct 03 2024 Right: <u>Crop Moisture Index by Division</u>. Weekly value for period ending Sep 28, 2024



# Fire Hazard Impacts

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

 Despite not being outlook for significant wildland fire potential there are some increasing concerns for fire spread as fuels continue to dry.

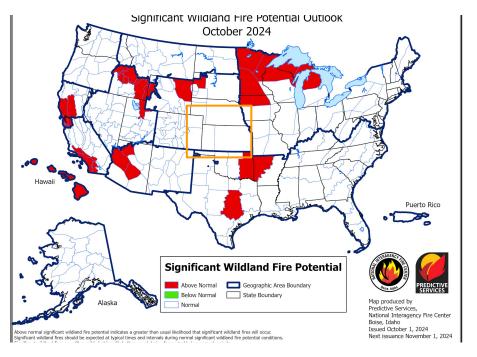


Image Caption: Significant Wildland Fire Potential Monthly Outlook for October 2024





## Seven Day Precipitation Forecast

- Unfortunately for the area there is no clear cut sign of rainfall for at least the next seven days and perhaps even longer than that.
- This continues to bring continuing concerns that drought will continue to worsen.

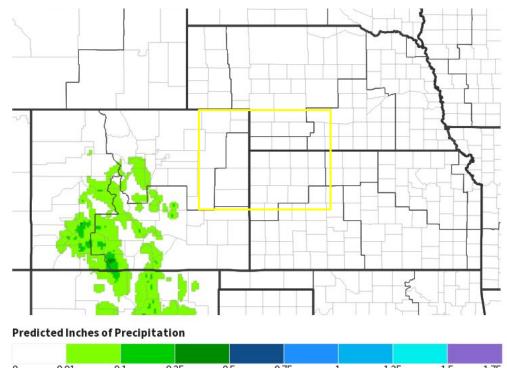


Image Caption: Weather Prediction Center <u>7-day precipitation forecast</u> valid Thursday October 3 to Thursday June 10

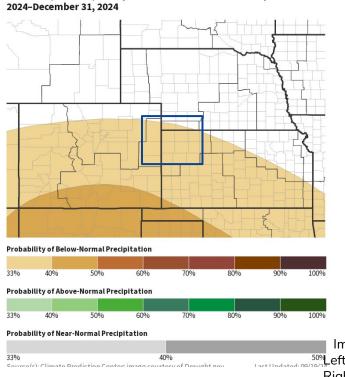


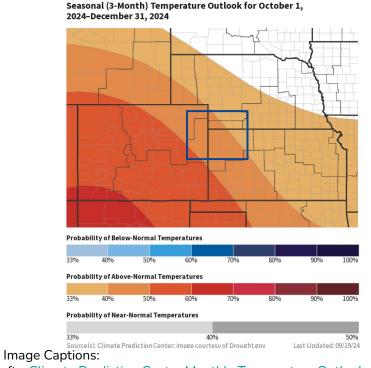
# Long-Range Outlooks

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

Seasonal (3-Month) Precipitation Outlook for October 1,

 A continued signal for above normal temperatures and below normal precipitation is seen throughout the end of the year.





Some Left - Climate Prediction Center Monthly Temperature Outlook.

Right - Climate Prediction Center Monthly Precipitation Outlook.

Valid October 2024



# Drought Outlook

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

 CPC continues to suggest that drought will continue to expand or persist across the majority of the area through the end of the year. Seasonal (3-Month) Drought Outlook for September 19, 2024-December 31, 2024

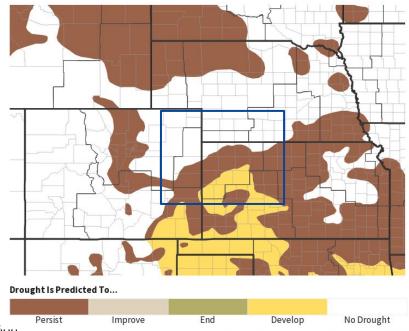


Image Caption.

Climate Prediction Center Seasonal Drought Outlook Released May 31, 2024

Valid: October 2024

#### Links to the latest:

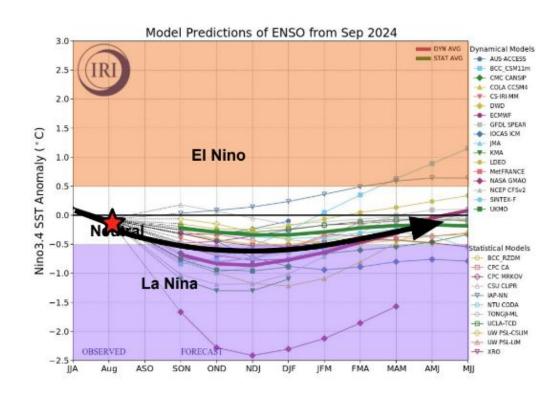
Climate Prediction Center Monthly Drought Outlook
Climate Prediction Center Seasonal Drought Outlook





## **ENSO Outlook**

 We spent some time this spring messaging a drier summer that really didn't pan out for most. A slower transition to La Nina may have played a role in this as ENSO has remained closer to Neutral through the summer but is now trending more towards La Nina which is what was anticipated a few month ago which is part of the reason for the recent dry and warm spell the region has been under.







### **ENSO Outlook**

- A favored probability of La Nina continuing through the winter is seen which would favor continued above normal temperatures and below normal precipitation.
- This does not mean it will not snow or get colder but typically does favor the area being more prone to more shorter lived but stronger cold air outbreaks.

#### Official NOAA CPC ENSO Probabilities (issued September 2024)

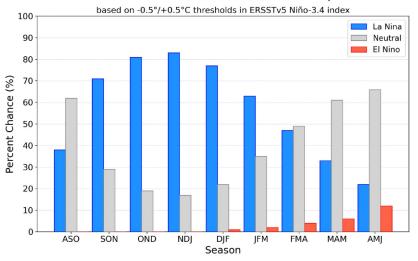


Figure 7. Official ENSO probabilities for the Niño 3.4 sea surface temperature index (5°N-5°S, 120°W-170°W). Figure updated 12 September 2024.



## **Contact Information**

For feedback, comments, questions specific to the Drought Information Statement please reach out to: <a href="mailto:nws.goodland@noaa.gov">nws.goodland@noaa.gov</a> or tyler.trigg@noaa.gov