

Drought Information Statement for Tri-State Area

Valid December 02, 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 https://drought.gov/drought-information-statements.
- 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 has improved across much of the area over the past month after record precipitation.
- Some locations drought has also been eliminated due to snow and rain events.







U.S. Drought Monitor

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

Drought intensity and Extent

D1 (Moderate Drought): Rawlins, Decatur, Norton, Graham, Thomas, Sheridan, Red Willow

D0: Dundy, Hitchcock, Cheyenne (KS), Logan, Wallace, Sherman, Kit Carson, Cheyenne (CO), Greeley.

U.S. Drought Monitor

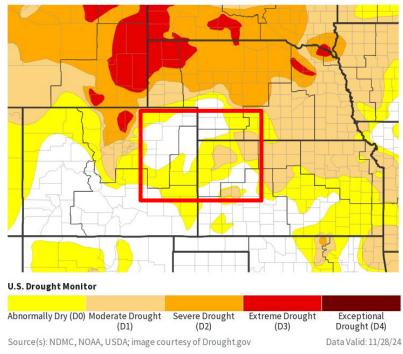


Image Caption: Goodland County Warning Area Drought Monitor. Valid 6am MDT Dec 02, 2024



Recent Change in Drought Intensity

Link to the latest 4-week change map for CONUS

4 Week Drought Monitor Class Change.
 Drought Worsened:

No Change: Norton

Drought Improved: Yuma, Kit Carson, Cheyenne (CO), Greeley, Wallace, Sherman, Cheyenne (KS), Dundy, Hitchcock, Rawlins, Thomas, Logan, Wichita, Gove, Sheridan, Red Willow, Graham

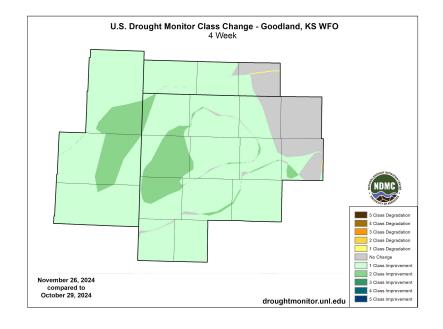
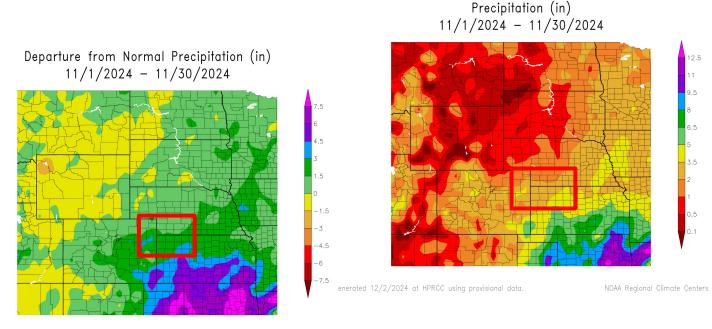


Image Caption: U.S. Drought Monitor 4-week change map valid 6am MDT Dec 02, 2024



Precipitation

- Northern and eastern portions of the area continue to have seen the most precipitation as of late.
- Although recent rainfall will help more of the area to become more normal.
- This was also the wettest November in history for Goodland with 3.35 inches, Hill City with 3.84 inches and the 3rd wettest for Burlington with 2.99 inches.



Generated 12/1/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

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:

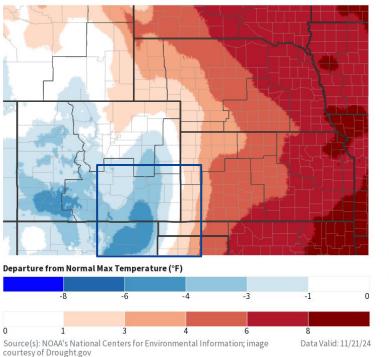
Dec 02 2024



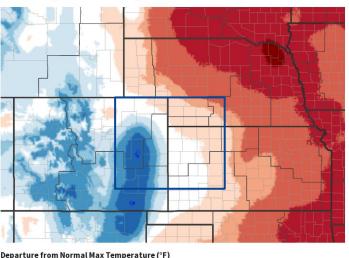
Temperature

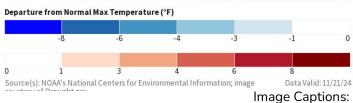
- Below normal temperatures were observed for eastern Colorado due to the lingering snowpack for the majority of the month.
 - Some of the snowpack remains still even at the start of December!

30-Day Temperature Anomaly



7-Day Temperature Anomaly





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

Data Courtesy High Plains Regional Climate Center. Date Valid:

Dec 02 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 here
- USDA Kansas Crop Progress and Condition Reports can be found here

Fire Hazard Impacts

• Recent rainfall has helped alleviate fire concerns across the area. As all fuels are dormant fire weather will still be heightened on very wind and dry days or if another prolonged period of no rainfall again occurs.

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.
- Despite the recent rains average stream flow remains below to much normal as the rainfall was absorbed by the soil as the soil moisture before the rains was not saturated. It would probably take another rain event in the near future for stream flows to begin to trend towards normal.

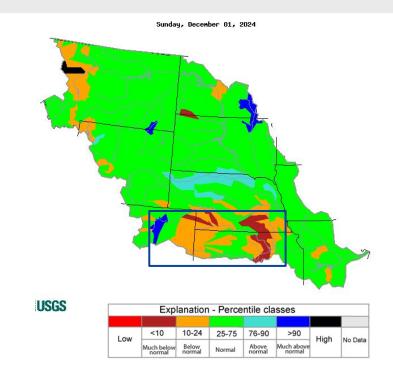
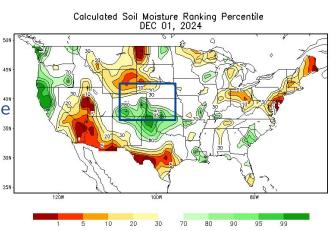


Image Caption: USGS 7 day average streamflow HUC map $\,$ valid $\,$ Dec $\,$ 02 $\,$ 2024



Agricultural Impacts

- Soil moisture is now above normal however after the rains.
- As a result this should help the winter crops assuming more precipitation can continue throughout the winter.



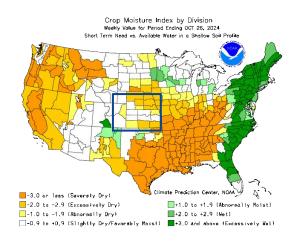


Image Captions:

Left: CPC Calculated <u>Soil Moisture Ranking Percentile</u> valid <u>Dec 02 2024</u> Right: <u>Crop Moisture Index by Division</u>. Weekly value for period ending Oct 26, 2024



Fire Hazard Impacts

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

 Despite not being outlook for significant wildland fire potential the fire risk is still present as vegetation is dorman resulting in ready to burn fuels.

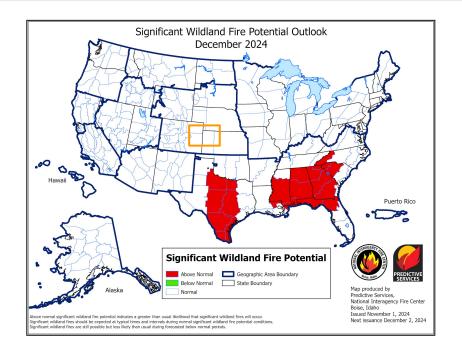


Image Caption: Significant Wildland Fire Potential Monthly Outlook for December 2024



WEATHER SER

Seven Day Precipitation Forecast

- As of right now there is no precipitation forecasted for the next week.
- The region is in a northwest flow pattern which is dependent on waves within the flow for precipitation chances.
- Some of these may be subtle that forecast guidance has not yet picked up on it.

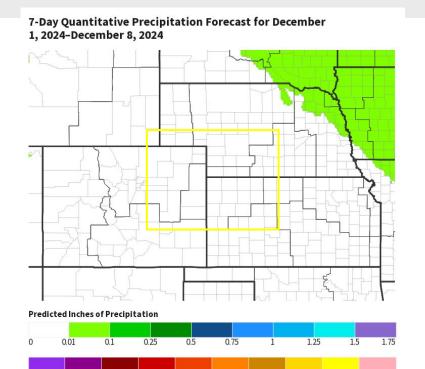


Image Caption: Weather Prediction Center <u>7-day precipitation forecast</u> valid Sunday December 1 to Sunday December 8

Source(s): National Weather Service Weather Prediction Center; image

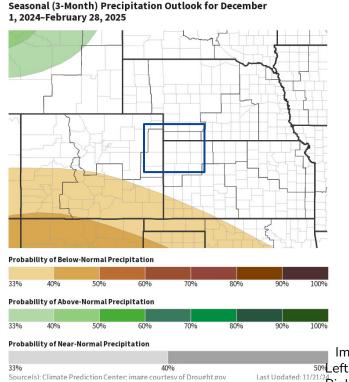


Last Updated: 12/01/24

Long-Range Outlooks The latest monthly and seasonal outlooks care

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

- The remainder of the winter season does not favor above normal nor below normal when it comes to precipitation or temperatures.
- Part of this is due to a weak La Nina as La Ninas typically favor below normal precipitation and above normal temperatures.
- The weak nature of the La Nina will make temperature and precipitation more mesoscale/short term driven when events due occur.



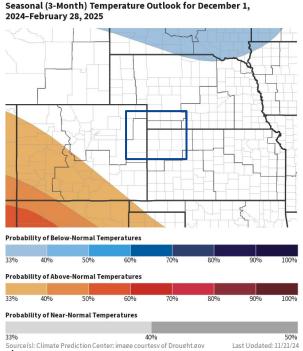


Image Captions:

Fight - Climate Prediction Center Monthly Temperature Outlook.

Right - Climate Prediction Center Monthly Precipitation Outlook.

Valid December 2024



Drought Outlook

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

- Where the current D1 drought is in place is forecast to see drought conditions continue.
- However where D0 is located is forecast to become drought free through the rest of the winter.
 - Again this is a forecast but there are some signals that support the potential for more alleviating of the drought conditions.

Links to the latest:

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

Seasonal (3-Month) Drought Outlook for November 30, 2024–February 28, 2025

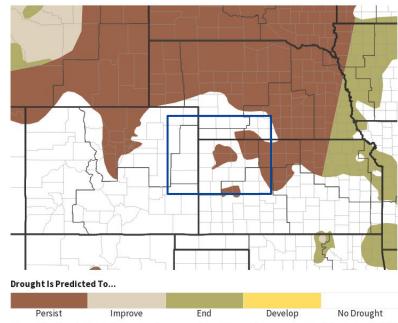


Image Caption: Source(s): Climate Prediction Center; image courtesy of Drought.gov

Last Updated: 11/30/24

Climate Prediction Center Monthly Drought Outlook Released Nov 30, 2024 Valid: December 2024 through

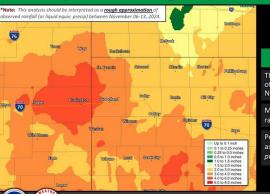
February 2025





Rain and Snow November Events

Precipitation Analysis (November 06-13, 2024)



November 06-13, 2024

Overview

The entire region received a significant amount of precipitation between November 6th and November 13th, 2024.

Most areas received at least 1.50 to 3 inches of rainfall (or liquid equivalent precipitation).

Portions of eastern Colorado received as much as 3 to 6 inches of rainfall (or liquid equivalent precipitation).

Thursday November 14, 2024

Precipitation Records:

November 8th: Goodland (1.56 inches) breaks previous record of 0.41 inches in 1970. **Hill City** (1.40 inches) breaks the previous record of 1.35 inches in in 1919. **Burlington** (1.26 inches) broke the old record of 0.54 inches in 1970.

Rainfall Analysis Monday November 18, 2024



Monday November 18, 2024

Overview

A low pressure system that developed in west Texas Sunday night tracked NNE through central Kansas during the day on Monday, bringing heavy rain to portions of the Tri-State area... mainly east of Hwy 83 in northwest Kansas where 1 to 2 inches of rain was observed.

November Snow

GOODLAND, KS

1) 13 SW Joes: 26.9 inches

Highest Snow Amounts from early

2) Flagler: 25 Inches

3) 1 SSW Seibert/ 15 S Stratton/9 SSW

Joes: 24 inches

Issued: 9:30 am MST Thursday November 21, 2024







Contact Information

For feedback, comments, questions specific to the Drought Information Statement please reach out to: nws.goodland@noaa.gov

