



Drought Information Statement for South Central NE and North Central KS

Valid October 3, 2024

Issued By: NWS Hastings, NE

Contact Information: nws.hastings@noaa.gov

- This product will likely be updated in Nov. 2024, or possibly 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/gid/DroughtInformationStatement> for previous statements.
 - Please visit <https://www.drought.gov/drought-status-updates> for regional drought status updates.
-
- Unfortunately, the *entire* 30-county NWS Hastings coverage area is now assigned at least the Abnormally Dry (D0) category for the first time in over a year (since Sept. 2023).
 - Following a hiatus during May-June 2024, Severe Drought (D2) returned to a few southeastern local counties in late-summer and still remains.





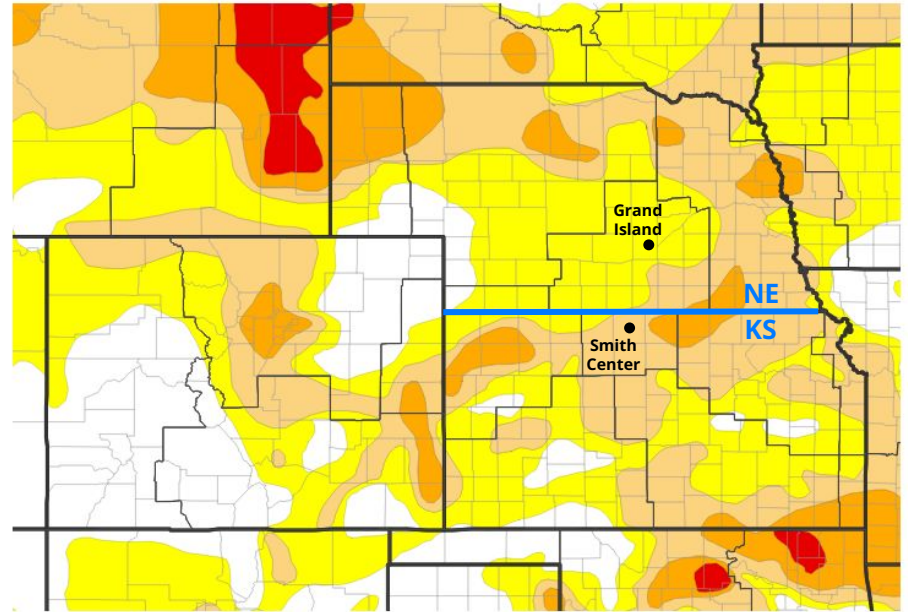
U.S. Drought Monitor

Link to the [latest U.S. Drought Monitor](#) for High Plains Region

Drought Intensity and Extent:

- **D2 Severe Drought:**
Includes all or part of the following counties:
Thayer, Nuckolls, Jewell, Mitchell
- **D1 Moderate Drought:**
Includes all or part of the following counties:
Adams, Clay, Fillmore, York, Franklin, Webster, Nuckolls, Thayer, Phillips, Smith, Jewell, Roofs, Osborne, Mitchell
- **D0 Abnormally Dry:**
Includes all or part of the following counties:
Valley, Greeley, Nance, Sherman, Howard, Merrick, Polk, Dawson, Buffalo, Hall, Hamilton, York, Gosper, Phelps, Kearney, Adams, Clay, Fillmore, Furnas, Harlan, Franklin, Webster, Phillips, Smith

U.S. Drought Monitor



U.S. Drought Monitor



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

Data Valid: 10/01/24





Common Drought Impacts By Category

Link to the [Common Drought Impacts By Category](#)

D0	Abnormally Dry	Going Into Drought: <ul style="list-style-type: none">• Short-term dryness slowing planting, growth of crops and pastures	Coming Out Of Drought: <ul style="list-style-type: none">• Some lingering water deficits• Crops and pastures not fully recovered
D1	Moderate Drought	<ul style="list-style-type: none">• Some damage to crops and pastures• Streams, reservoirs, wells low - some water shortages developing or imminent	
D2	Severe Drought	<ul style="list-style-type: none">• Crop or pasture losses likely• Water shortages common• Water restrictions can be imposed	
D3	Extreme Drought	<ul style="list-style-type: none">• Major crop and pasture losses• Widespread water shortages or restrictions possible	
D4	Exceptional Drought	<ul style="list-style-type: none">• Exceptional and widespread crop and pasture losses• Water shortages in reservoirs, streams, and wells can create water emergencies	





Short-Term Precipitation Recap (the last week) and Forecast (the next week)

Link to the [latest U.S. Drought Monitor](#) for High Plains Region

- Recap of U.S. Drought Monitor "data week" Sept. 24-Oct. 1

(NOTE: any precipitation that fell since 7am TUESDAY "didn't count" for this week's Drought Monitor)

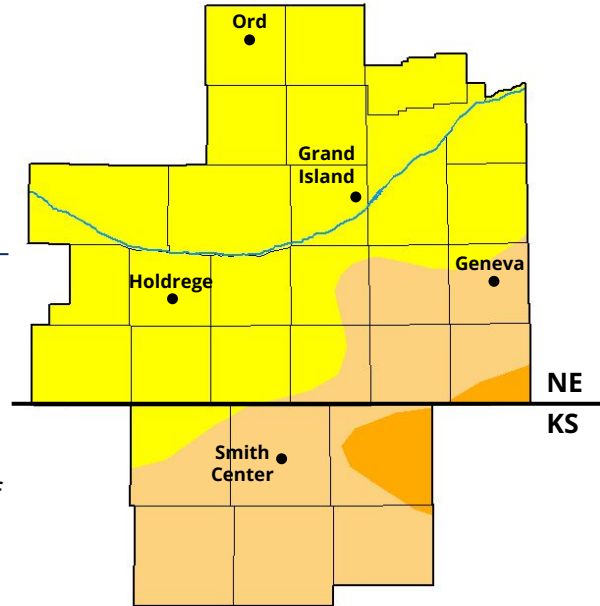
The Sept. 24-Oct. 1 "Drought Monitor Week" featured **EXTREMELY DRY** conditions area-wide.

The **ONLY** precipitation consisted of some spotty, limited rain that occurred during the day on Sept. 24th mainly within counties along/south of the KS border (amounts mainly 0.10" or less).

- Looking ahead the upcoming week Oct. 4-10: UNFORTUNATELY, the recent dryness looks to continue marching on.

The latest official WPC precipitation forecast, along with ensemble forecast model data, calls for **ALMOST ZERO** chance of rain across our 30-county coverage area through at least Oct. 10th.

U.S. Drought Monitor Hastings, NE WFO



October 1, 2024

(Released Thursday, Oct. 3, 2024)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	38.15	3.88	0.00	0.00
Last Week 09-24-2024	32.20	67.80	38.47	3.88	0.00	0.00
3 Months Ago 07-02-2024	70.07	29.93	8.23	0.00	0.00	0.00
Start of Calendar Year 01-01-2024	16.14	83.86	62.04	46.34	25.12	0.00
Start of Water Year 09-26-2023	5.23	94.77	78.96	63.84	36.89	15.81
One Year Ago 10-03-2023	5.23	94.77	78.86	64.46	36.89	15.81

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

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 Tinker
CPC/NOAA/WS/NCEP



droughtmonitor.unl.edu



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

National Weather Service
Hastings, Nebraska



Latest Regional Drought Monitor Map + Sept. 2024 Precip Extremes For NWS Hastings Area

Link to the [latest U.S. Drought Monitor](#) for High Plains Region

Sept. 2024 Local Precipitation Extremes:

VERY DRY FOR MOST! Most places only had 0.05-0.80” (merely 2-40% of normal). The main/localized wetter exception occurred in parts of north central KS

U.S. Drought Monitor

High Plains Climate Region

October 1, 2024

(Released Thursday, Oct. 3, 2024)

Valid 8 a.m. EDT

SEPT. 2024 Highest Precipitation

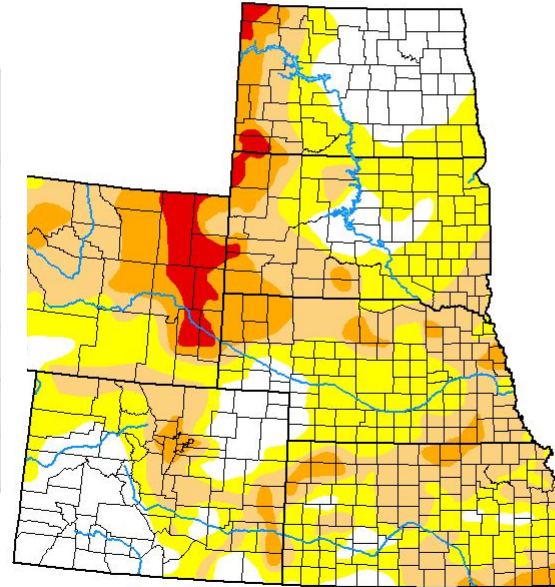
SEPT. 2024 Lowest Precipitation

A FEW of our **WETTEST** stations (NWS/CoCoRaHS/NeRAIN)

A FEW of our **DRIEST** stations (NWS/CoCoRaHS/NeRAIN)

Cawker City KS (NWS observer): 4.72”	2W Arcadia NE (NWS observer): 0.01”
Lebanon KS (NWS observer): 3.55”	4N Litchfield NE (NWS observer): 0.01”
Glen Elder KS (NWS observer): 2.96”	2NW Rockville NE (NWS observer): 0.03”
9E Hunter KS (CoCoRaHS): 2.67”	Loup City NE (NWS observer): 0.05”
Ionia KS (NWS observer): 2.52”	Bradshaw NE (NWS observer): 0.05”
8SSW Spalding NE (NeRAIN): 2.12”	3W Elba NE (NeRAIN): 0.05”

FOR REFERENCE: “normal” Sept. precipitation across MOST of our coverage area ranges from 1.70-2.50” (generally lowest west/highest east)



Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

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>

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National Oceanic and Atmospheric Administration

U.S. Department of Commerce

National Weather Service
Hastings, Nebraska

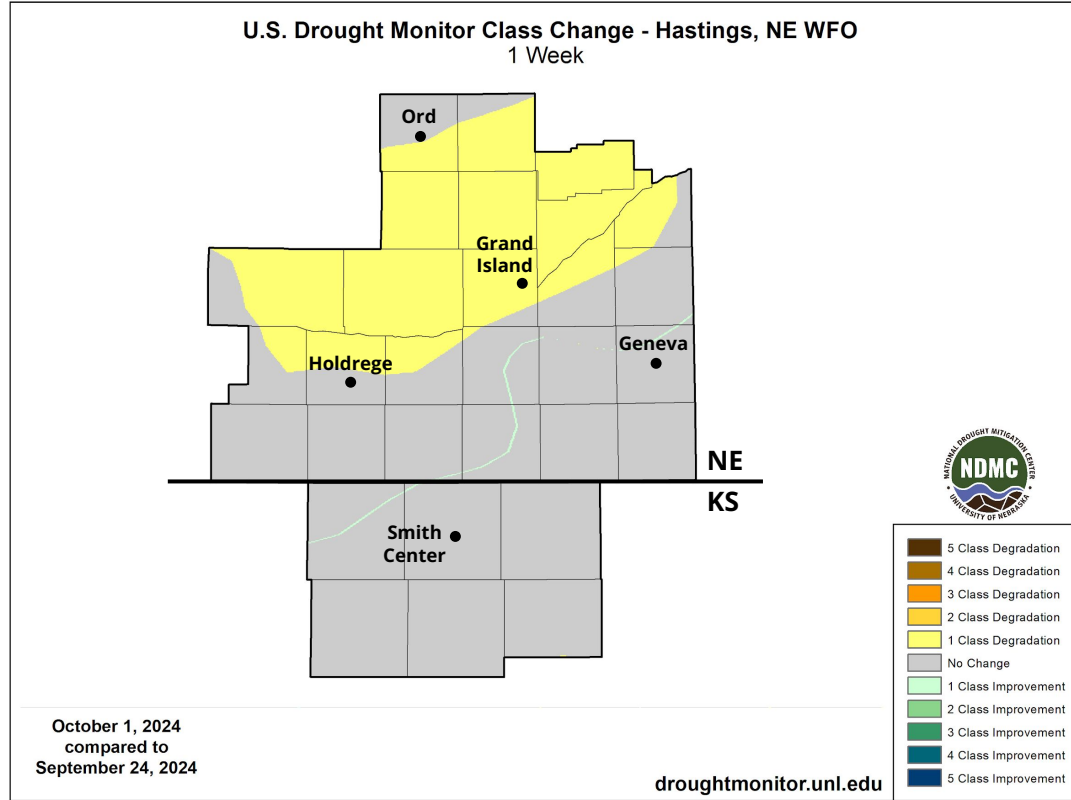


Recent Change in Drought Intensity - 1 Week Change

NWS Hastings [1-Week Drought Class Change...Oct. 1 vs. Sept. 24](#)

One Week Drought Monitor Classification Change:

- **Drought Worsened:**
 - Widespread 1-class degradation (from D-nothing to D0) across several central/south central NE counties
- **No Change:**
 - There was NO CHANGE in drought classification within the gray-shaded areas
- **Drought Improved:**
 - NO drought improvement occurred





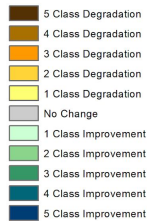
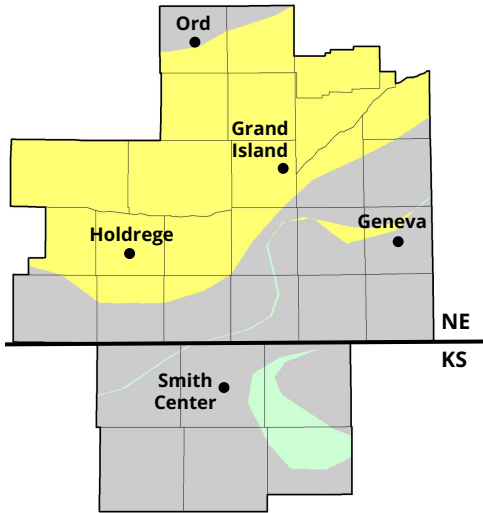
Recent Change in Drought Intensity - 4 and 12 Week Change

NWS Hastings 4-week & 12-week Drought Class Changes...vs. current Oct. 1 maps

4-WEEK CHANGE MAIN TAKEAWAYS: 1) *widespread* 1-class degradation in several Nebraska counties...2) ...limited 1-class improvement in KS

12-WEEK CHANGE MAIN TAKEAWAYS: *widespread* 1-2 class degradation most of the area, and localized 3-class degradation mainly Thayer/Jewell

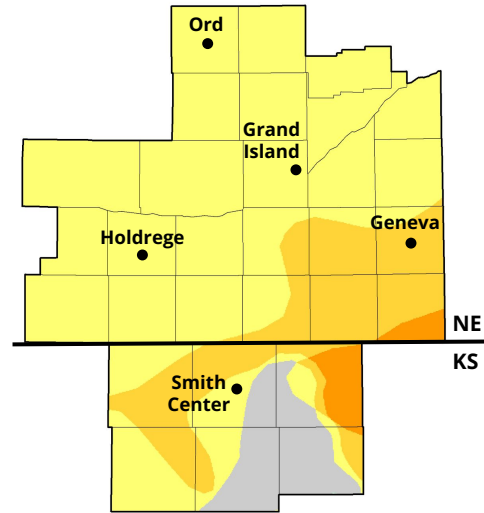
U.S. Drought Monitor Class Change - Hastings, NE WFO
4 Week



October 1, 2024
compared to
September 3, 2024

droughtmonitor.unl.edu

U.S. Drought Monitor Class Change - Hastings, NE WFO
12 Week



October 1, 2024
compared to
July 9, 2024

droughtmonitor.unl.edu



National Oceanic and
Atmospheric Administration

U.S. Department of Commerce

National Weather Service
Hastings, Nebraska



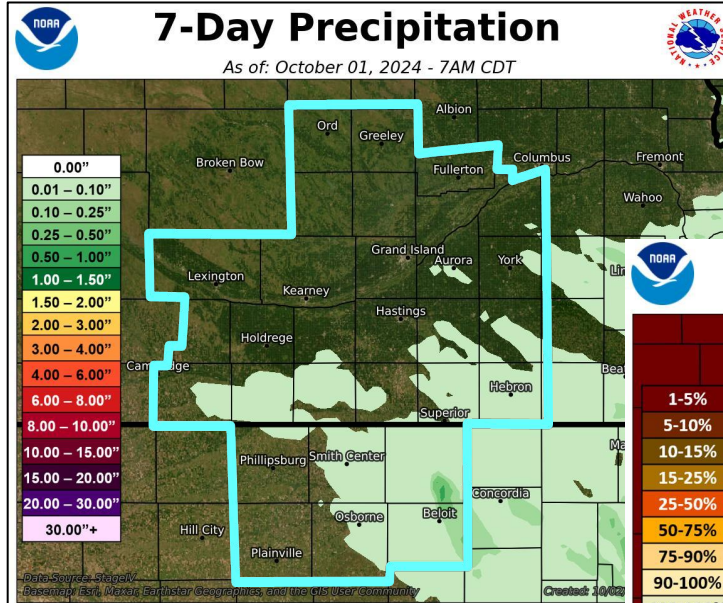
Precipitation (Last 7-Day Drought Monitor Period)

7-Day Precipitation/Percent-of-Normal (Sept. 24-Oct 1)...Map Links [HERE](#)

Main Takeaways:

The Sept. 24-Oct. 1 "Drought Monitor Week" featured **EXTREMELY DRY** conditions area-wide.

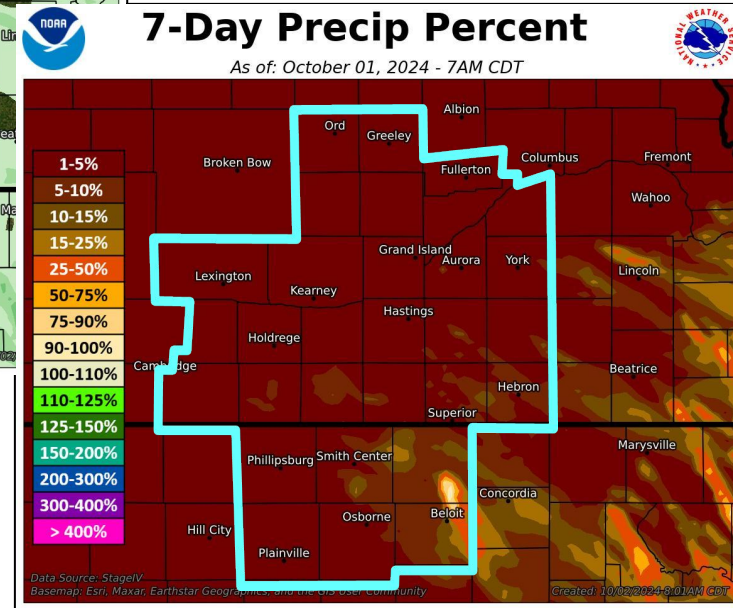
The **ONLY** precipitation consisted of some spotty, limited rain that occurred during the day on Sept. 24th mainly within counties along/south of the KS border (amounts mainly 0.10" or less).



PLEASE NOTE:

Any precipitation that fell **AFTER** 7am Tuesday, Oct. 1 is not reflected here as it fell after the weekly Drought Monitor "data cutoff".

NWS Hastings area outlined in light blue (24 NE counties, 6 KS counties)





Precipitation (Last 30-Day Drought Monitor Period)

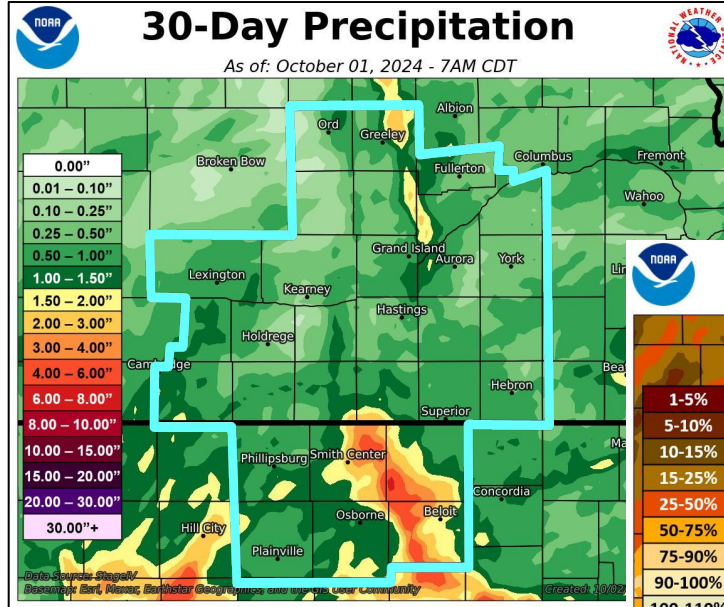
30-Day Precipitation/Percent-of-Normal (Sept. 2 - Oct. 1)...Map Links [HERE](#)

Main Takeaways:

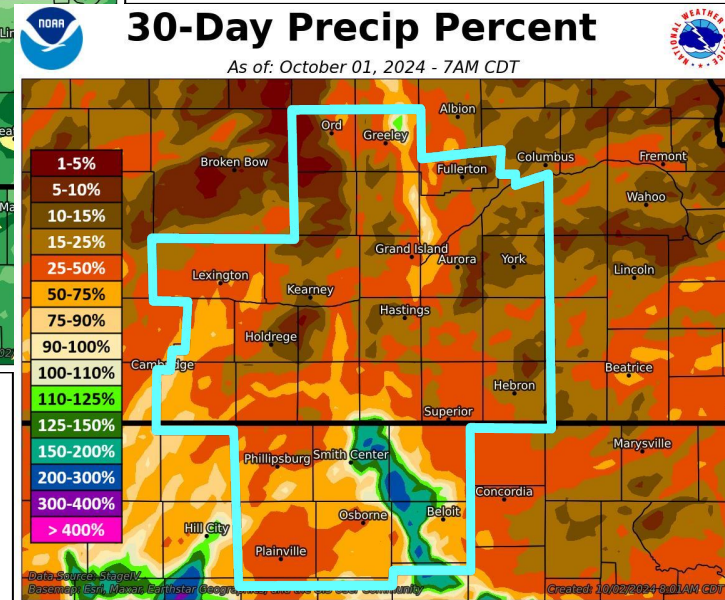
The vast majority of our coverage area had **FAR BELOW NORMAL** precipitation over the last 30 days.

The majority of our area measured between 0.05-0.80"...or roughly 2-40% of normal. In fact, the month of September was among the Top-5 driest on record in the Nebraska Tri Cities (Grand Island/Hastings/Kearney)

The primary, limited-in-area exception of above normal rainfall (*as much as 2-4+" in some spots*) fell within parts of mainly Smith, Jewell and Mitchell counties in KS. In our Nebraska coverage area, only very tiny parts of mainly Greeley, Howard, Merrick and Webster counties saw totals of at least 1.00-1.50".



NWS Hastings area outlined in light blue (24 NE counties, 6 KS counties)



PLEASE NOTE:

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Precipitation (Last 90-Day Drought Monitor Period)

90-Day Precipitation/Percent-of-Normal (July 4 - Oct. 1)...Map Links [HERE](#)

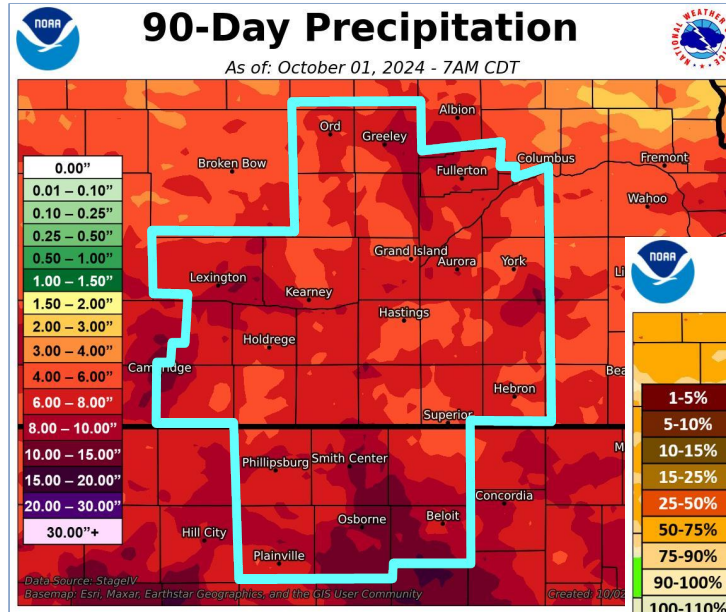
Main Takeaways:

Roughly 97% of our coverage area had **BELOW NORMAL** precipitation over the last 90 days, including roughly 15% of the area that received **LESS THAN HALF NORMAL**.

The majority of our area measured somewhere between 4.00-7.50"...or roughly 45-85% of normal.

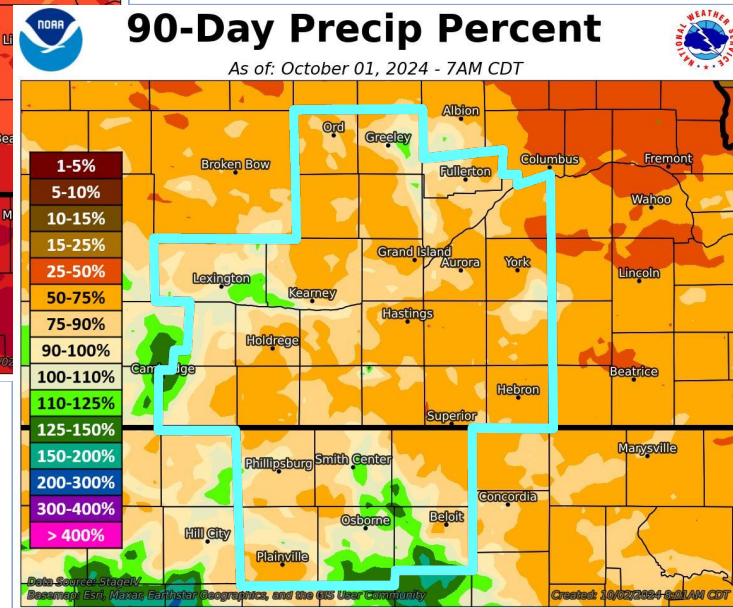
The very limited pockets of above normal precipitation were primarily confined to parts of the following counties: Furnas, Smith, Jewell, Osborne, Mitchell.

Meanwhile, the very-driest locations were scattered all throughout the area, but if anything tended to stand out the most in counties such as York, Polk, Valley in Nebraska, along with southern Rooks in Kansas.

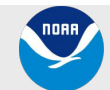


PLEASE NOTE:

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NWS Hastings area outlined in light blue (24 NE counties, 6 KS counties)





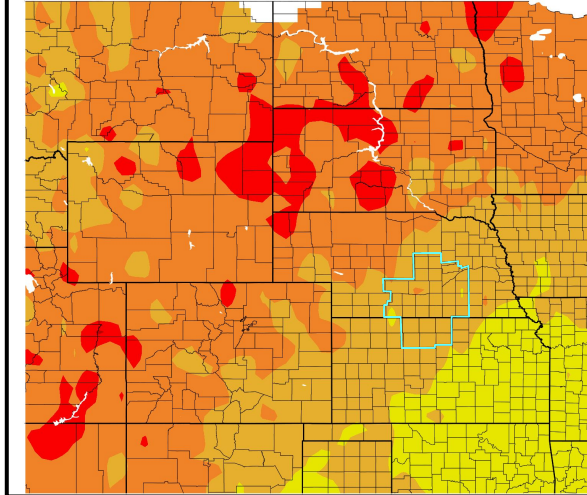
Temperature Trends (Last 7 and 30 Days)

High Plains Regional Climate Center [7-Day](#) & [30-Day](#) Temperature Departures From Normal

Main Takeaways (Last 7 Days):

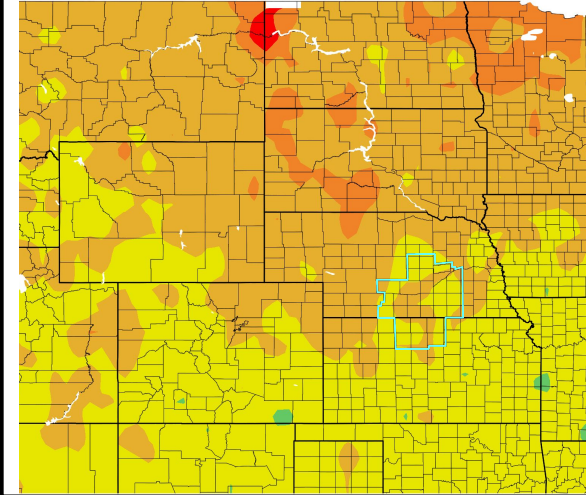
The final several days of September into the first few days of October featured **WELL-ABOVE NORMAL** temperatures across our area, with most places around 6-7° above normal.

Departure from Normal Temperature (F)
9/26/2024 - 10/2/2024

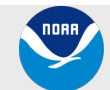


NWS Hastings area outlined in light blue

Departure from Normal Temperature (F)
9/3/2024 - 10/2/2024



NWS Hastings area outlined in light blue





Summary of Impacts

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

Hydrologic Impacts:

- Thanks to roughly 3 months of overall-dryness, many stream/river basins in our coverage area...especially from the Platte River southward into northern Kansas...are experiencing below normal flows (*including severe hydrologic drought especially along the Little Blue/Big Blue basins*).

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:

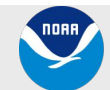
- Given the combination of pronounced recent dryness, seasonal drying of vegetation/fuels, and an increase in windy days now that the fall season is underway, fire danger has worsened over the last few weeks and will likely continue to worsen until any appreciable rains hopefully arrive at some point.

Other Impacts:

- There are no known impacts at this time

Mitigation Actions:

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





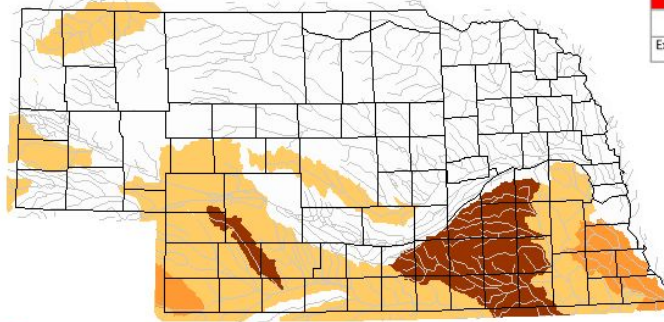
Hydrologic Conditions and Impacts

USGS Streamflow Information...Maps Shaded Only For Areas With BELOW NORMAL Flows

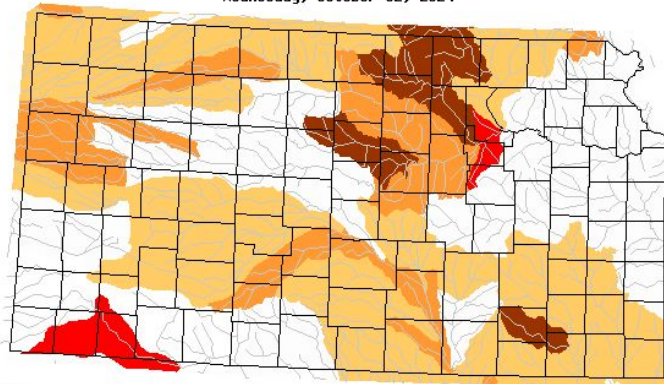
Main Takeaways:

- Thanks to roughly 3 months of overall-dryness, many stream/river basins in our coverage area...especially from the Platte River southward into northern Kansas...are experiencing below normal flows.
- The worst local streamflow conditions...severe hydrologic drought...is most pronounced within the Little Blue/Big Blue basins in Nebraska.

Hednesday, October 02, 2024



Hednesday, October 02, 2024



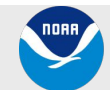
Explanation - Percentile classes

Low	<=5	6-9	10-24
Extreme hydrologic drought	Severe hydrologic drought	Moderate hydrologic drought	Below normal

Image Captions:

Top - [Nebraska Below Normal 7-Day Average Streamflow Compared To Historical Streamflow For The Day Of The Year](#) , from USGS, valid Oct. 2

Bottom - [Kansas Below Normal 7-Day Average Streamflow Compared To Historical Streamflow For The Day Of The Year](#) , from USGS, valid Oct. 2



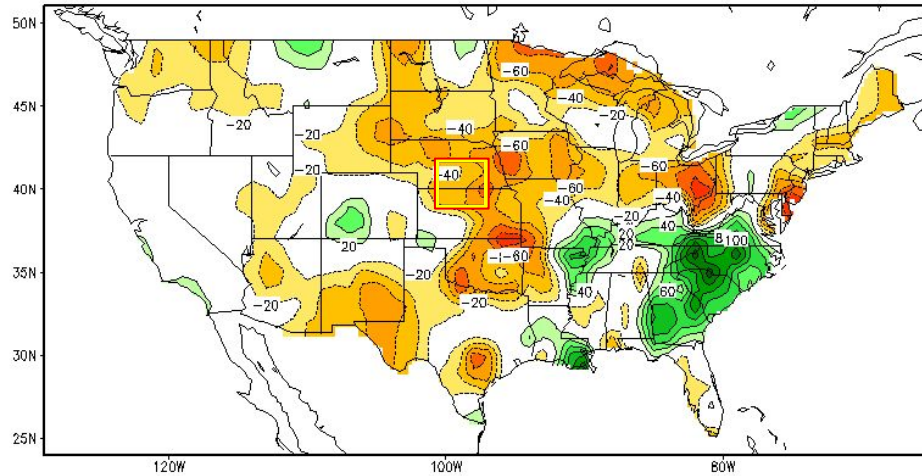


Agricultural Impacts / Soil Moisture

Climate Prediction Center (CPC) [Soil Moisture Status](#)

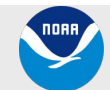
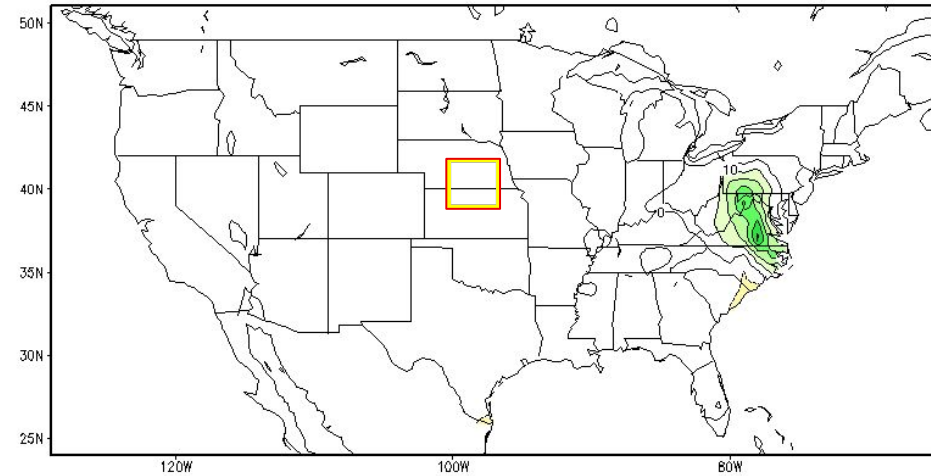
Soil Moisture Departure From Normal (mm)

Calculated Soil Moisture Anomaly (mm)
OCT 02, 2024



Soil Moisture Change Since End Of Previous Month (mm)

Calculated Soil Moisture Anomaly Change
OCT 02, 2024 from SEP.30





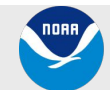
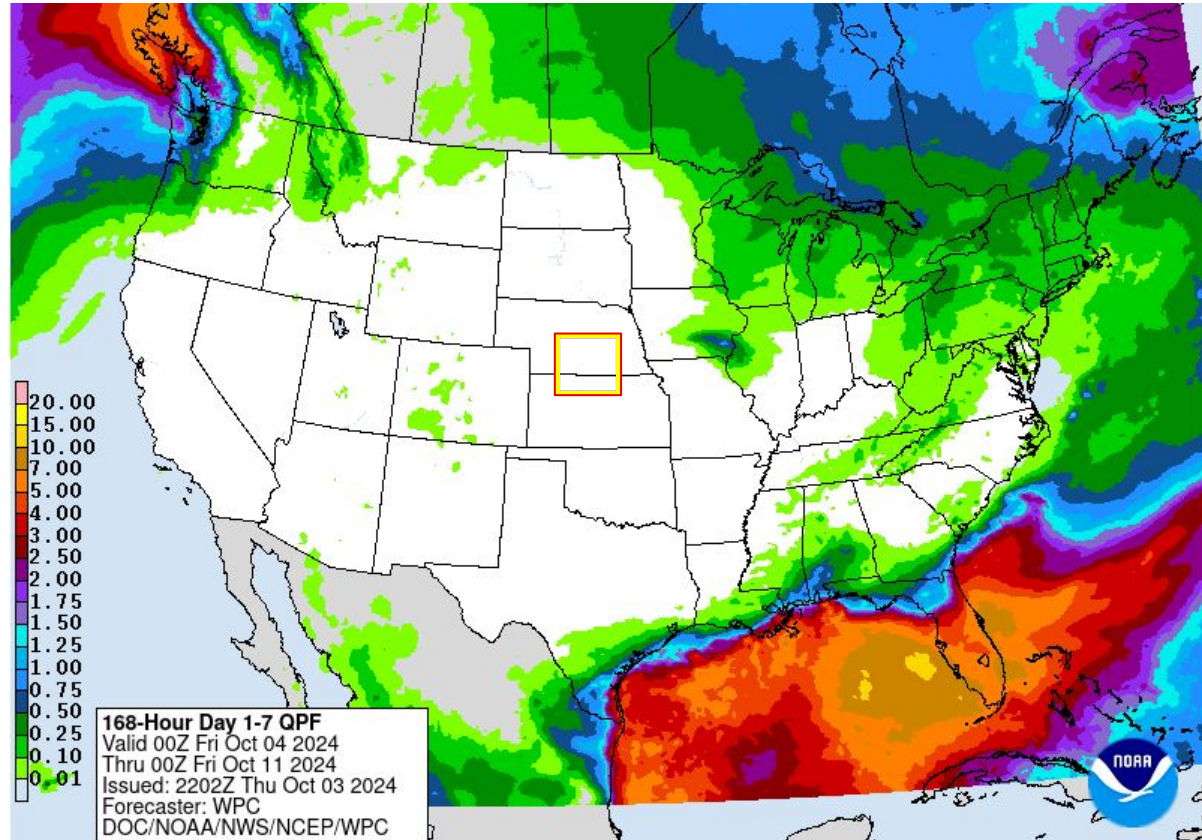
7-Day Precipitation Forecast

From [Weather Prediction Center \(WPC\)](#)...Valid Oct. 4-10

Main Takeaways:

UNFORTUNATELY, the recent dryness looks to continue marching on.

The latest official WPC precipitation forecast, along with ensemble forecast model data, calls for **ALMOST ZERO** chance of rain across our 30-county coverage area through at least Oct. 10th.



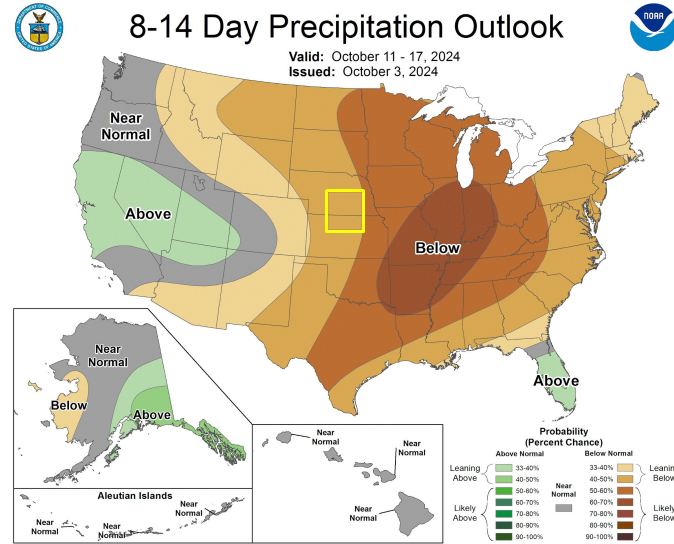
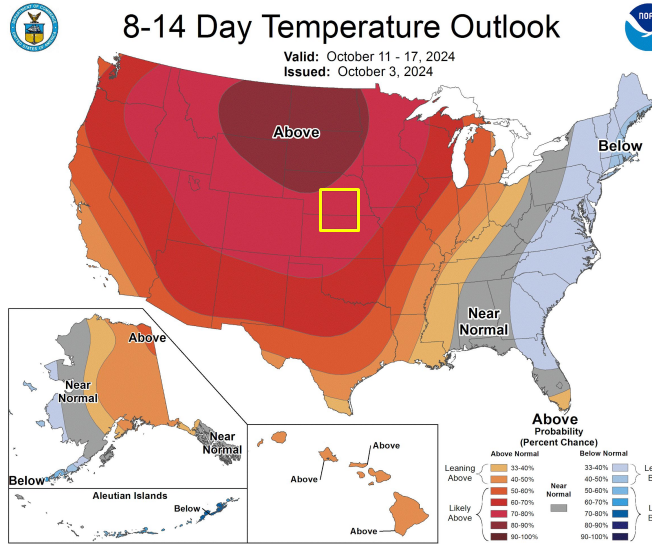


8-14 Day Outlooks - Climate Prediction Center (CPC)

CPC [Temperature and Precipitation Outlooks](#)...Valid Oct. 11-17

Main Takeaways:

- Temperatures:**
 There is a very likely chance of continued above normal temperatures through mid-October, with high temperatures (on most days) into the 70s/80s.
- Precipitation:**
 Our entire coverage area leans fairly strongly toward a continuation of below normal precipitation through mid-October.



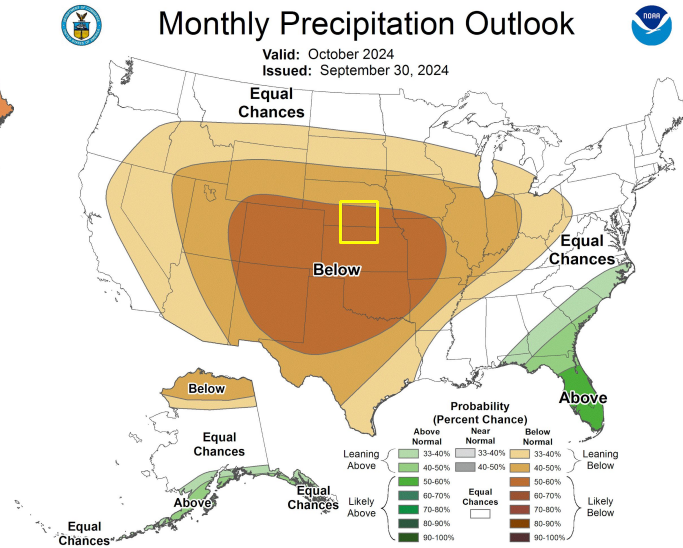
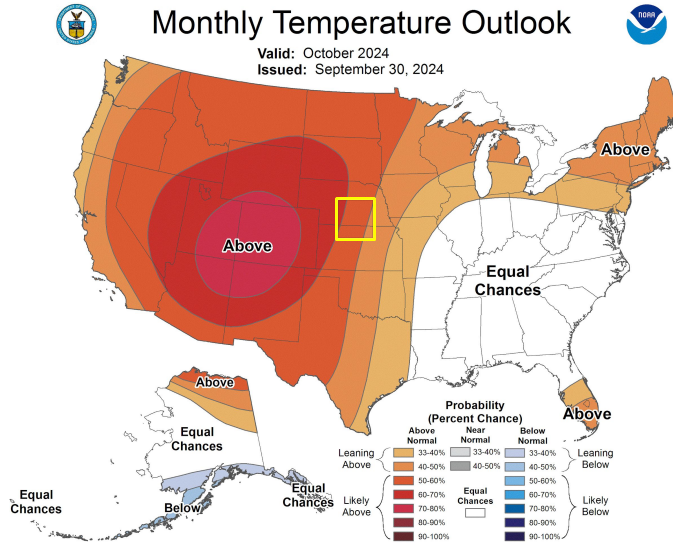


Monthly Outlooks - Climate Prediction Center (CPC)

CPC [Monthly Temperature and Precipitation Outlooks](#)...Valid For OCTOBER 2024

Main Takeaways:

- **Temperatures:** Our entire coverage area leans toward October (*as a whole*) featuring above normal temperatures...especially the western half.
- **Precipitation:** Our entire coverage area leans toward October (*as a whole*) featuring below normal precipitation.





Drought Outlook (Seasonal)

CPC [Seasonal Drought Outlook](#)...Valid Through DECEMBER 2024

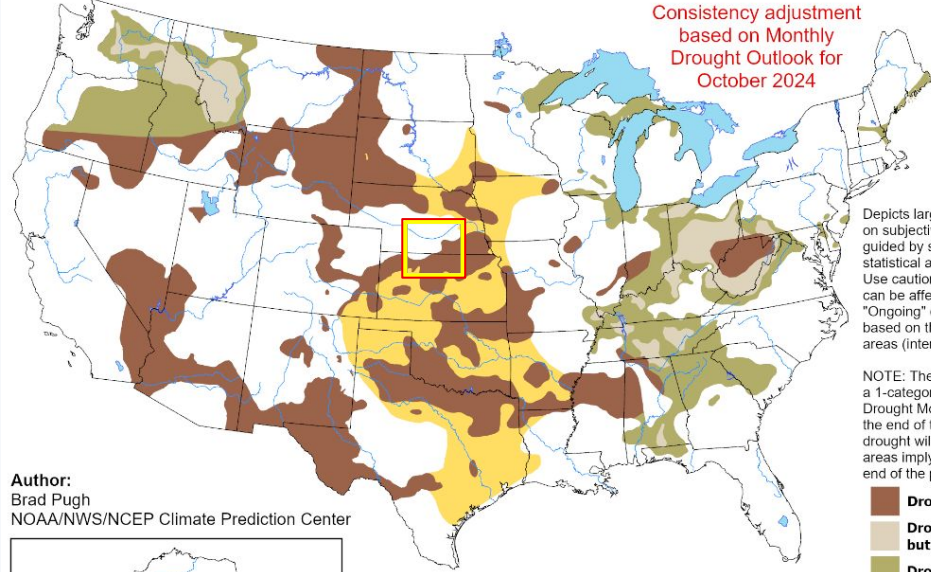
Main Takeaways:

- Between now and the end of the year, there is a fairly strong signal that those local areas currently in official drought categories (D1-or-worse) will remain in drought.
- However, at least for now, there is less certainty that those "better off" areas (currently assigned D0) will worsen to official drought categories.

U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period

Valid for October 1 - December 31, 2024
Released September 30, 2024

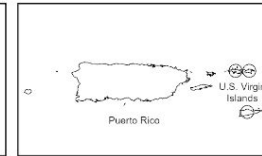
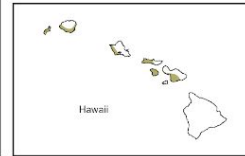
Consistency adjustment
based on Monthly
Drought Outlook for
October 2024



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:
Brad Pugh
NOAA/NWS/NCEP Climate Prediction Center



- Drought persists
- Drought remains, but improves
- Drought removal likely
- Drought development likely
- No drought



<https://go.usa.gov/3eZ73>

Links to the latest:

- [Climate Prediction Center Monthly Drought Outlook](#)
- [Climate Prediction Center Seasonal Drought Outlook](#)



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

National Weather Service
Hastings, Nebraska



Contact Information & References

For feedback, comments, questions specific to THIS INFO PACKET:

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Other contacts for NE/KS drought input:

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ehunt2@unl.edu
(402) 617-4190
- Kansas State University
Assistant State Climatologist
Matthew Sittel
msittel@ksu.edu
(785) 532-1087

The U.S. Drought Monitor is produced through a partnership between the National Drought Mitigation Center at the University of Nebraska-Lincoln, the United States Department of Agriculture and the National Oceanic and Atmospheric Administration.

Additional Information Sources:

- [U.S. Drought Monitor](#)
- [National Integrated Drought Information System](#)
- [High Plains Regional Climate Center](#)
- [USGS River Information](#)
- [NWS River Stages & Forecasts](#)
- [NWS Hastings LOCAL Temperature & Precipitation Data](#)

Monitor our webpage for forecast information out to 7 days [HERE](#)

Social media: Follow us on **Facebook (US National Weather Service Hastings)** and **X (@NWSHastings)** for more information!

