



Drought Information Statement for the Missouri Ozarks

Valid October 10, 2024

Issued By: *WFO Springfield, MO*

Contact Information: *contact.sgf@noaa.gov*

- This product will be updated October 17, 2024 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/sgf/SGFDroughtMonitor> for additional information.



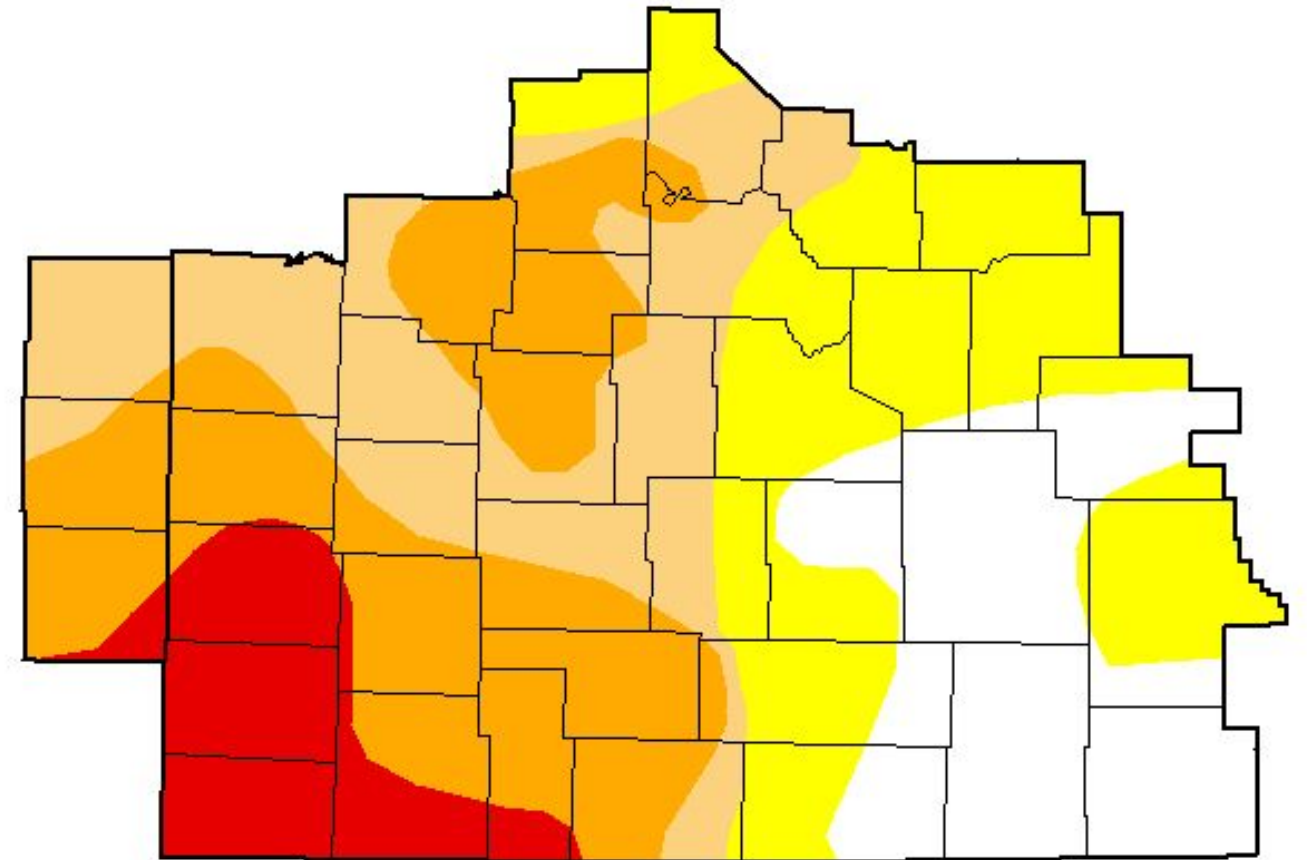


U.S. Drought Monitor

October 10, 2024
10:26 AM

Link to the [latest U.S. Drought Monitor](#) for Lower Midwest

- **Conditions worsened to Extreme (D3) drought over parts of far southwest Missouri and far southeast Kansas. Severe (D2) drought slightly expanded over parts of southwestern Missouri and far southeast Kansas with the Moderate (D1) drought persisting for portions of central MO as well.**
- **Drought Intensity and Extent**
 - D3 (Extreme Drought): Portions of Barry, Stone, Lawrence, and Jasper along with McDonald and Newton counties in southwest MO and portions of Cherokee county in southeast Kansas
 - D2 (Severe Drought): Portions of Morgan, Benton, Hickory, St Clair, Cedar, Polk, Dallas, Taney, Webster, Greene, Douglas, Dade, Barton, Barry, Jasper, Stone, and Vernon along with Christian county in western MO and parts of Cherokee, Crawford, and Bourbon counties in southeast Kansas.
 - D1 (Moderate Drought): The remaining portions of Crawford and Bourbon counties in southeast Kansas. In southwest Missouri, all or portions of Vernon, Barton, St. Clair, Cedar, Dade, Benton, Hickory, Polk, Greene, Taney, Douglas, Webster, Dallas, Laclede, Morgan, and Miller counties.





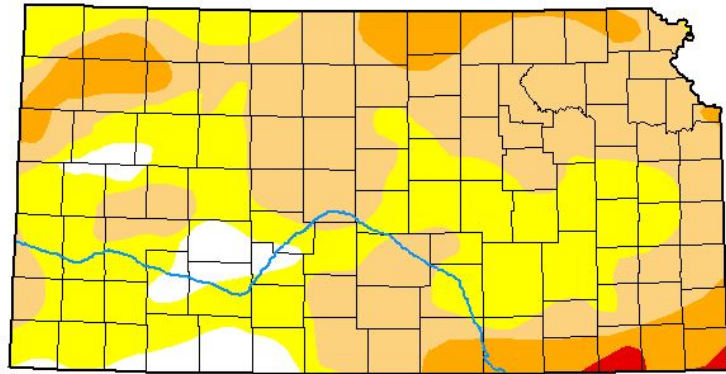
State Drought Monitor

October 10, 2024
10:26 AM

Link to [Recent Change Maps](#)

U.S. Drought Monitor Kansas

October 8, 2024
(Released Thursday, Oct. 10, 2024)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|---|-------|-------|-------|-------|-------|------|
| Current | 5.87 | 94.13 | 56.74 | 11.44 | 0.59 | 0.00 |
| Last Week 10-01-2024 | 7.48 | 92.52 | 50.40 | 8.34 | 0.00 | 0.00 |
| 3 Months Ago 07-09-2024 | 53.12 | 46.88 | 18.41 | 3.94 | 0.00 | 0.00 |
| Start of Calendar Year 01-02-2024 | 20.54 | 79.46 | 53.43 | 19.44 | 2.88 | 0.00 |
| Start of Water Year 09-26-2023 | 18.61 | 81.39 | 64.30 | 45.56 | 20.60 | 1.65 |
| One Year Ago 10-10-2023 | 17.11 | 82.89 | 66.93 | 47.97 | 20.60 | 1.65 |

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>

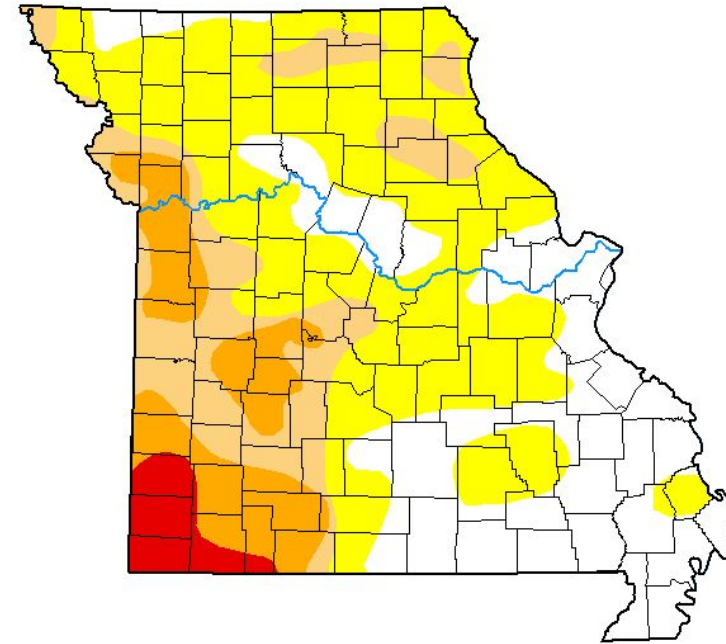
Author:
Richard Tinker
CPC/NOAA/NWS/NCEP



droughtmonitor.unl.edu

U.S. Drought Monitor Missouri

October 8, 2024
(Released Thursday, Oct. 10, 2024)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|---|-------|-------|-------|-------|-------|------|
| Current | 29.24 | 70.76 | 29.43 | 14.64 | 3.41 | 0.00 |
| Last Week 10-01-2024 | 39.30 | 60.70 | 23.73 | 7.95 | 0.00 | 0.00 |
| 3 Months Ago 07-09-2024 | 95.42 | 4.58 | 0.00 | 0.00 | 0.00 | 0.00 |
| Start of Calendar Year 01-02-2024 | 6.73 | 93.27 | 71.50 | 30.45 | 1.09 | 0.00 |
| Start of Water Year 09-26-2023 | 18.08 | 81.92 | 54.87 | 27.22 | 9.04 | 0.00 |
| One Year Ago 10-10-2023 | 16.12 | 83.88 | 59.70 | 28.03 | 10.30 | 0.00 |

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/NWS/NCEP



droughtmonitor.unl.edu

Main Takeaways

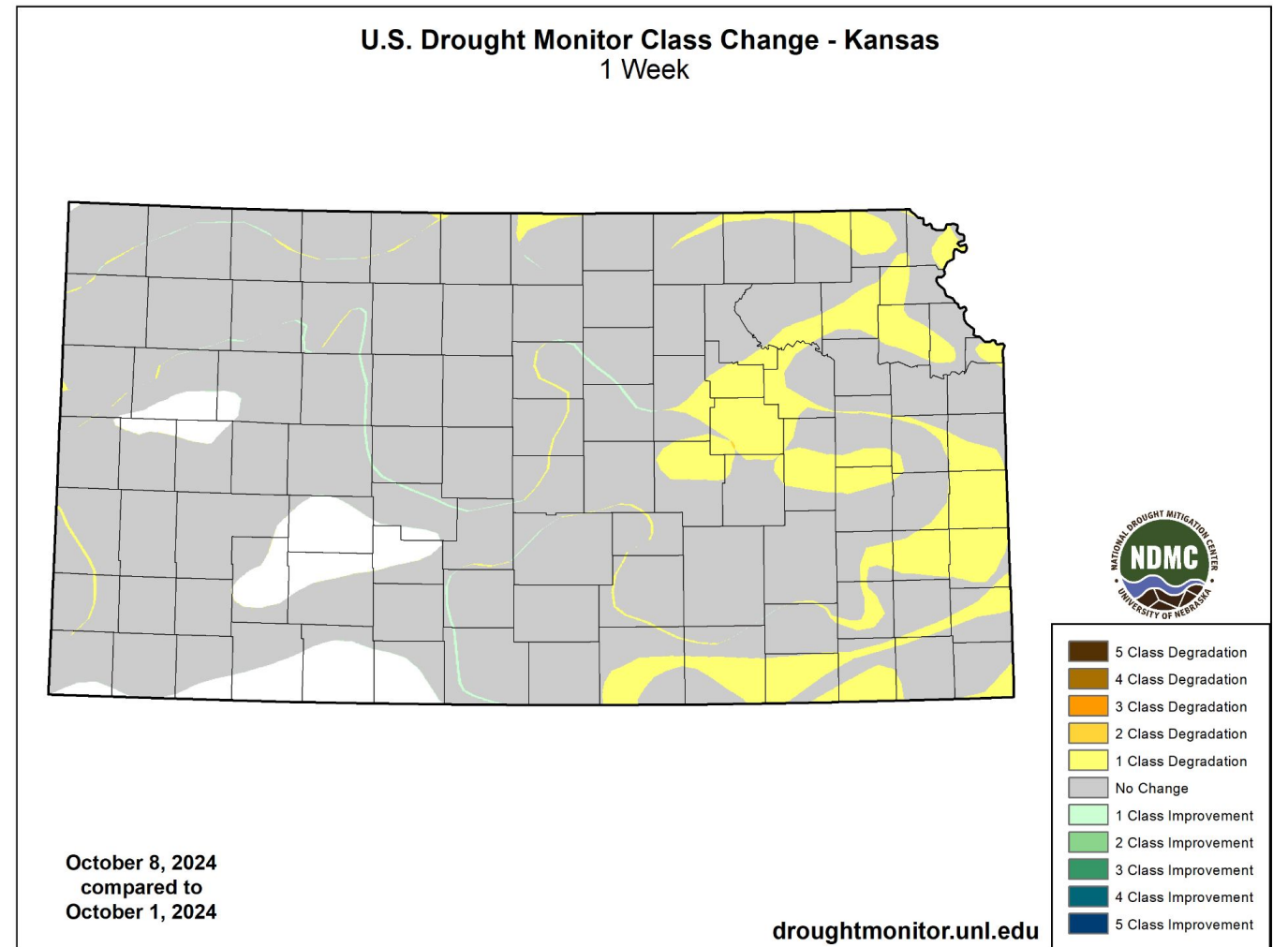
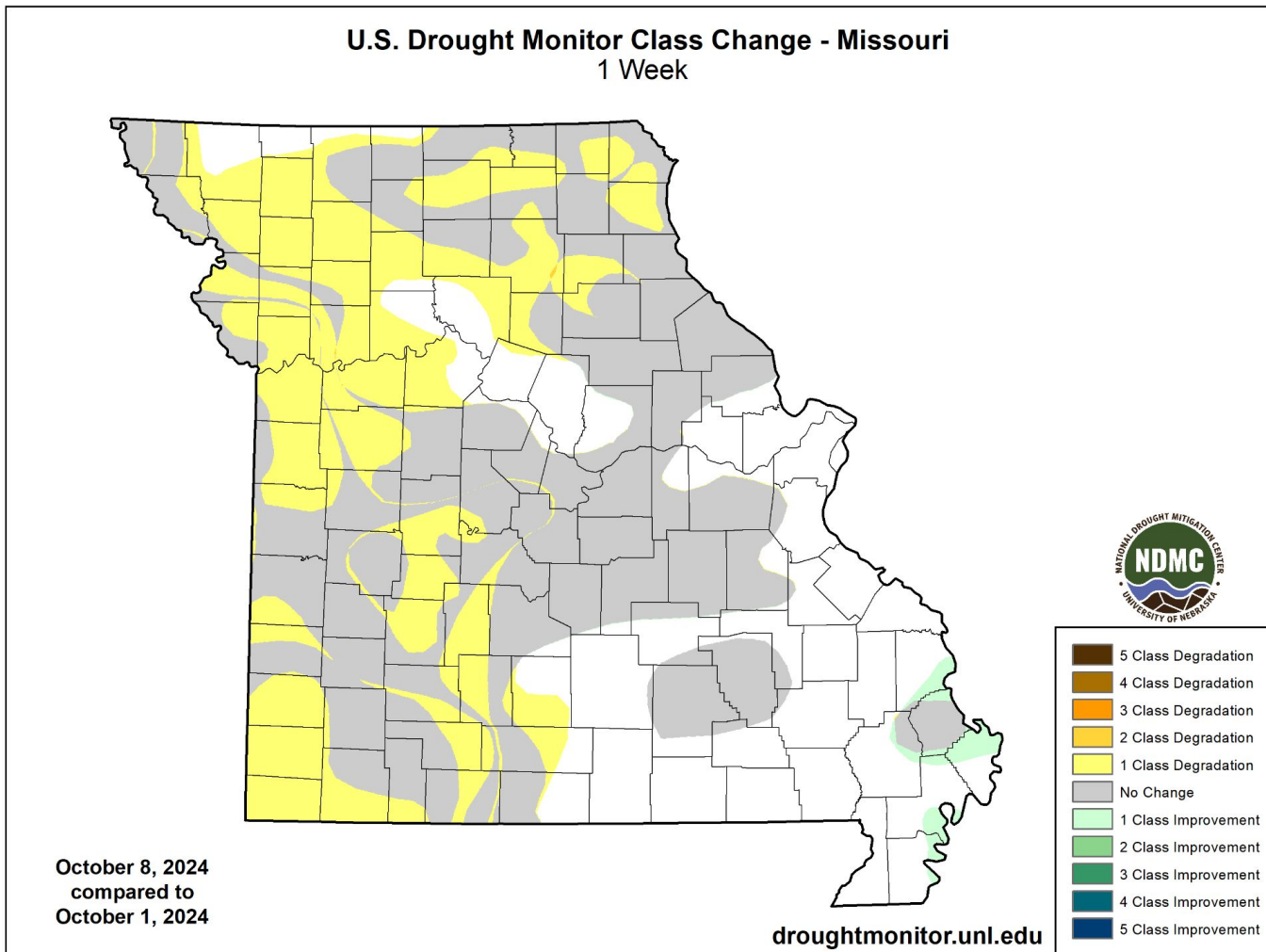
- Conditions worsened to Extreme (D3) drought for parts of southwest Missouri and southeast Kansas.
- Severe (D2) Drought persisted for some and worsened for others over western Missouri into far southeast Kansas.
- Moderate (D1) drought remained across portions of central Missouri.



Recent Change in Drought Intensity

October 10, 2024
10:26 AM

Link to [Recent Change Maps](#)



Main Takeaways

- Drought conditions have continued to degrade the past week over western and south-central Missouri.
- Southeast Kansas has also seen slight increases in drought.
- Portions of Missouri saw no change over the past week, but are still in Moderate (D1) to Severe (D2) Drought.

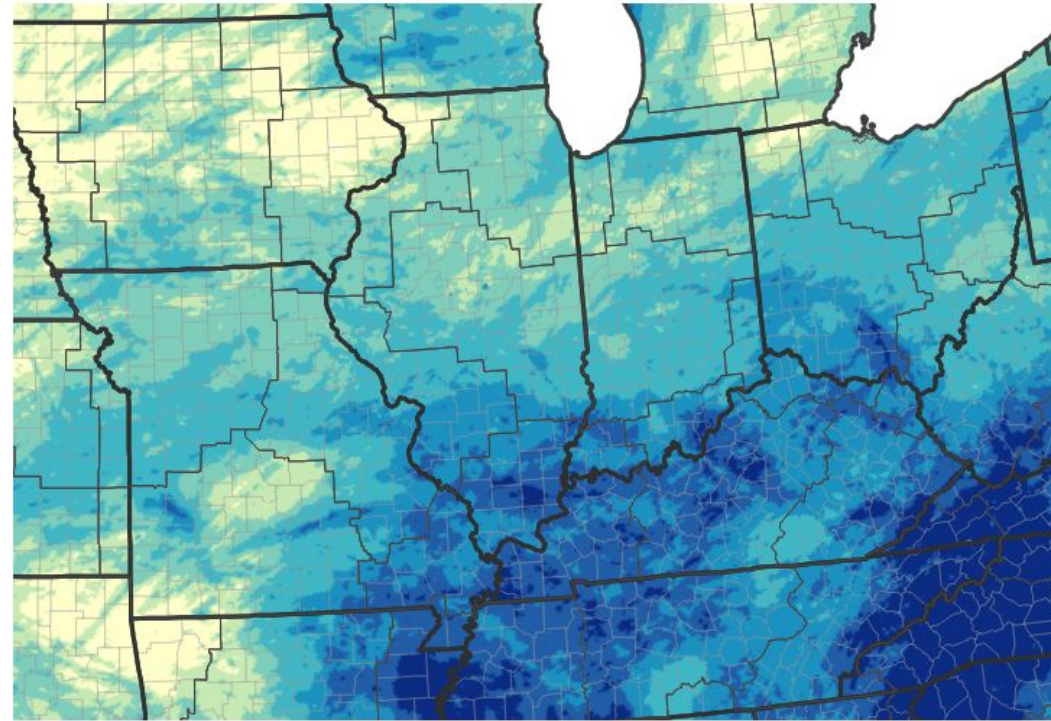




Precipitation

October 10, 2024
10:26 AM

30-Day Precipitation Accumulations (Inches)

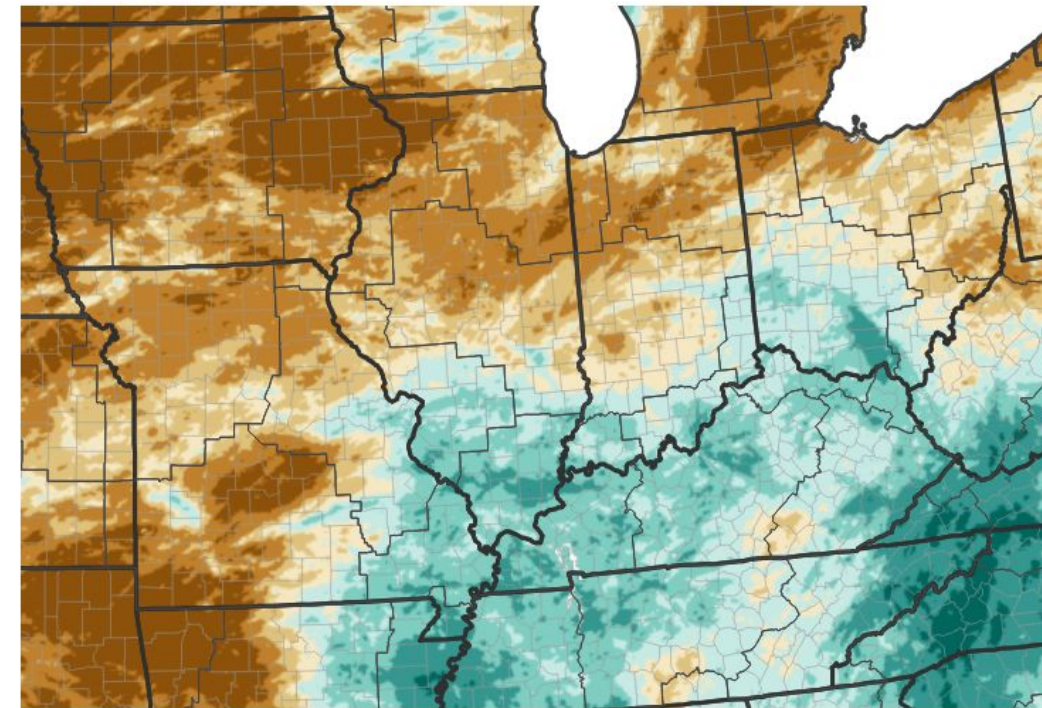


Inches of Precipitation

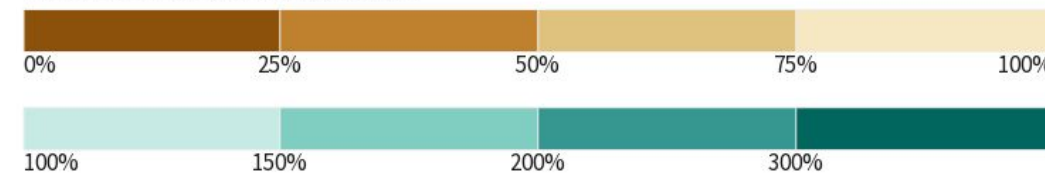


Source(s): National Weather Service Multi-Radar Multi-Sensor System; image courtesy of Drought.gov Last Updated: 10/09/24

30-Day Percent of Normal Precipitation



Percent of Normal Precipitation (%)



Source(s): National Weather Service Multi-Radar Multi-Sensor System; image courtesy of Drought.gov Last Updated: 10/09/24

Main Takeaways

- Many areas west of Highway 65 into southeast Kansas have received less than 2 inches of rain in the past 30 days, with portions seeing less than a half inch of rain. Areas east of Highway 65 received widespread 1-4" and even some pockets of 4-6" inches.
- Nearly all areas saw less than average rain, with some receiving less than 25% of normal over the past month.

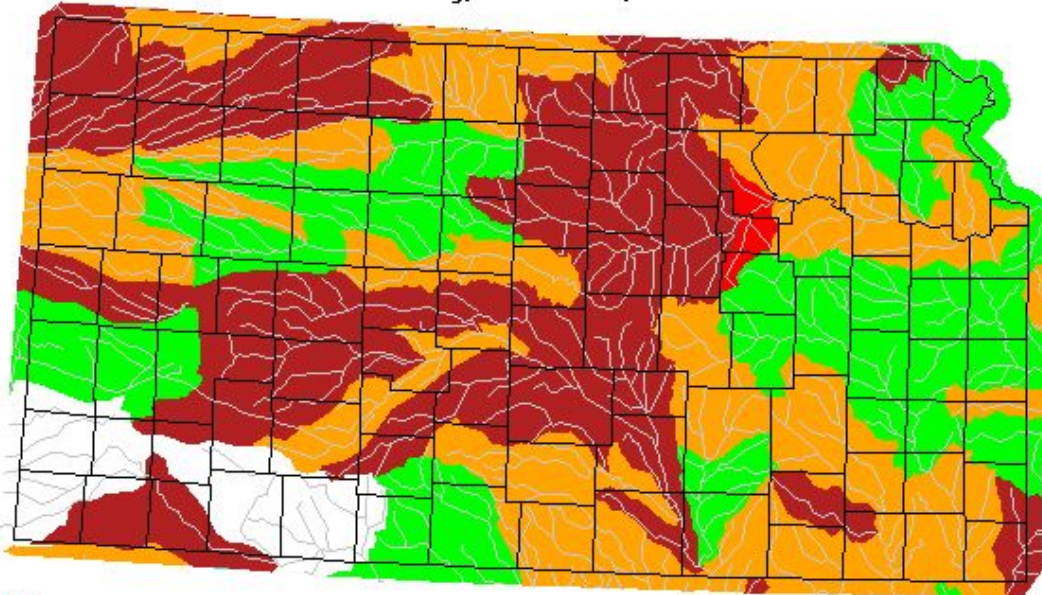




Hydrologic Conditions and Impacts

October 10, 2024
10:26 AM

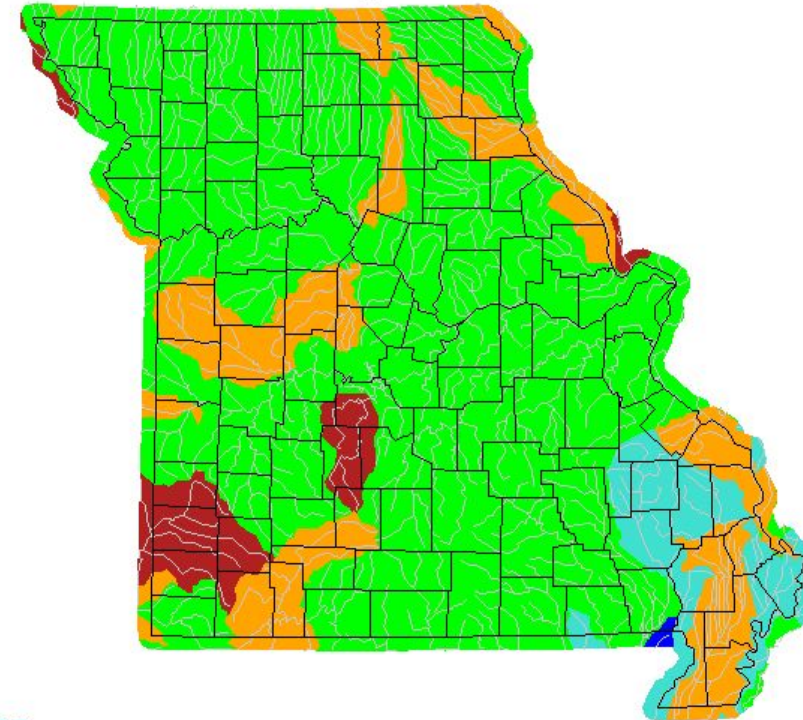
Wednesday, October 09, 2024



| Explanation - Percentile classes | | | | | | | |
|----------------------------------|-------------------|--------------|--------|--------------|-------------------|------|---------|
| Low | <10 | 10-24 | 25-75 | 76-90 | >90 | High | No Data |
| | Much below normal | Below normal | Normal | Above normal | Much above normal | | |

Image Caption: : [USGS 7 day average streamflow HUC map - Kansas.](#)

Wednesday, October 09, 2024



| Explanation - Percentile classes | | | | | | | |
|----------------------------------|-------------------|--------------|--------|--------------|-------------------|------|---------|
| Low | <10 | 10-24 | 25-75 | 76-90 | >90 | High | No Data |
| | Much below normal | Below normal | Normal | Above normal | Much above normal | | |

Image Caption: : [USGS 7 day average streamflow HUC map - Missouri.](#)

Main Takeaways

- Streamflows over the past week over Southeast Kansas into western Missouri have as little as less than 10% of normal over the Spring River and parts of the Neosho and Elk river basins, with some portions having 10-24% of normal.
- Sufficient rain and spring fed streams over much of Missouri remained at 25-75% of normal flow.





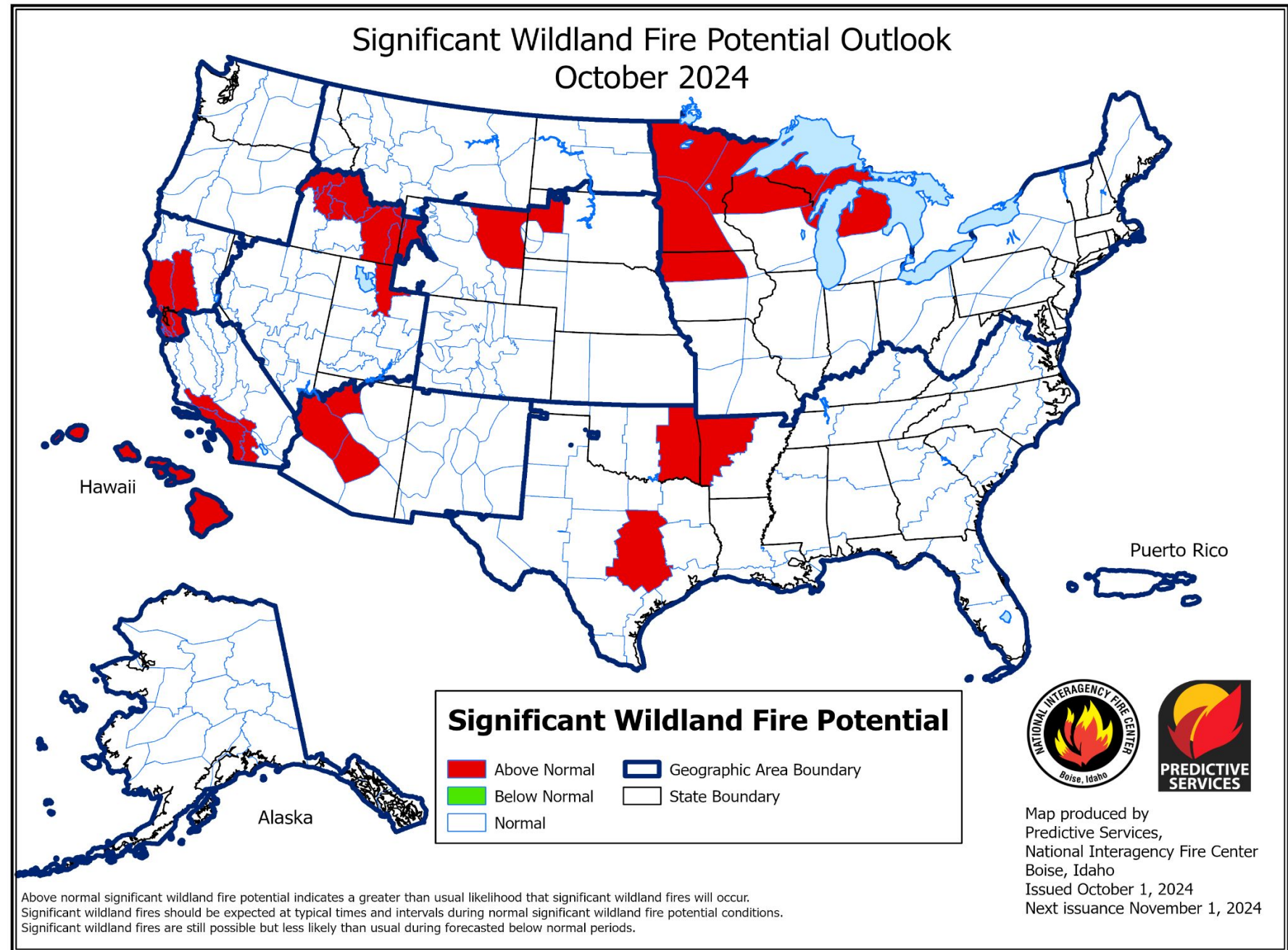
Fire Hazard Impacts

October 10, 2024
10:26 AM

Link to [Wildfire Potential Outlooks from the National Interagency Coordination Center](#).

Main Takeaways

- Although southwest Missouri and southeast Kansas are not highlighted in above normal Significant Wildland Fire Potential for October, portions of the Ozarks may still experience slightly increased risk of wildland fire potential.





Summary of Impacts

October 10, 2024

10:26 AM

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

Hydrologic Impacts

- Significant rainfall deficiencies were noted over southeast Kansas to along Highway 65 in Missouri. The Marmaton and Spring Rivers as well as most smaller creeks including some east of Highway 65 were in a low water threshold.

Agricultural Impacts

- Fall plantings have been impacted with wilting and bug infestation reported with some estimating extreme degree of loss to near crop failure.
- Pastures are providing little to no feed, requiring supplemental feeding in some regions.

Fire Hazard Impacts

- Local Fire Chiefs have reported widespread browning of vegetation and a recent increase in grass fires.

Other Impacts

- There are no additional known impacts at this time.

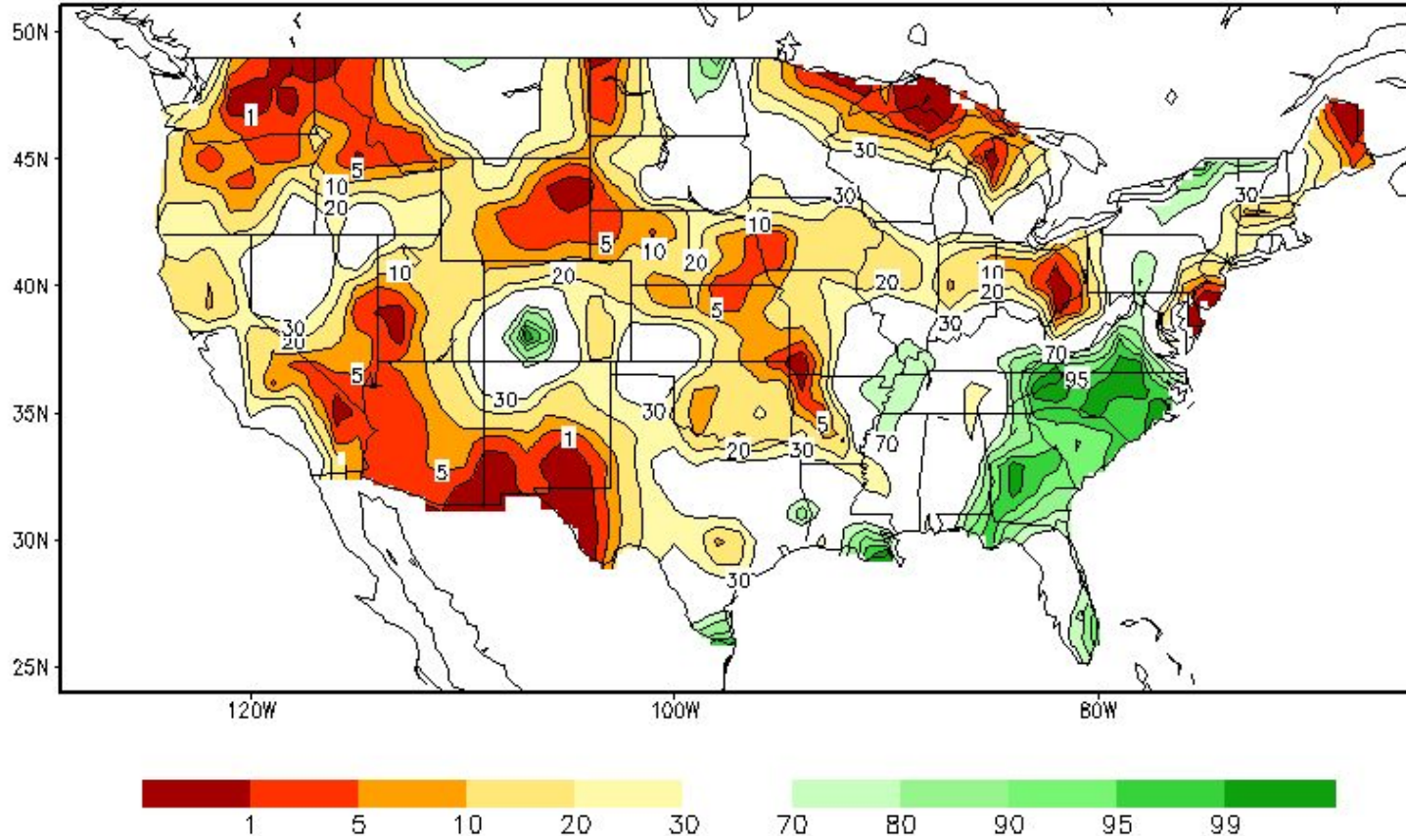
Mitigation actions

- The Missouri Department of Agriculture has an AgriStress Helpline at 833-897-2474.
- The University of Missouri Extension Office has a Psychological Service Clinic to aid farmers and ranchers.
- More information is available at muext.us/PSCFarmRanch.

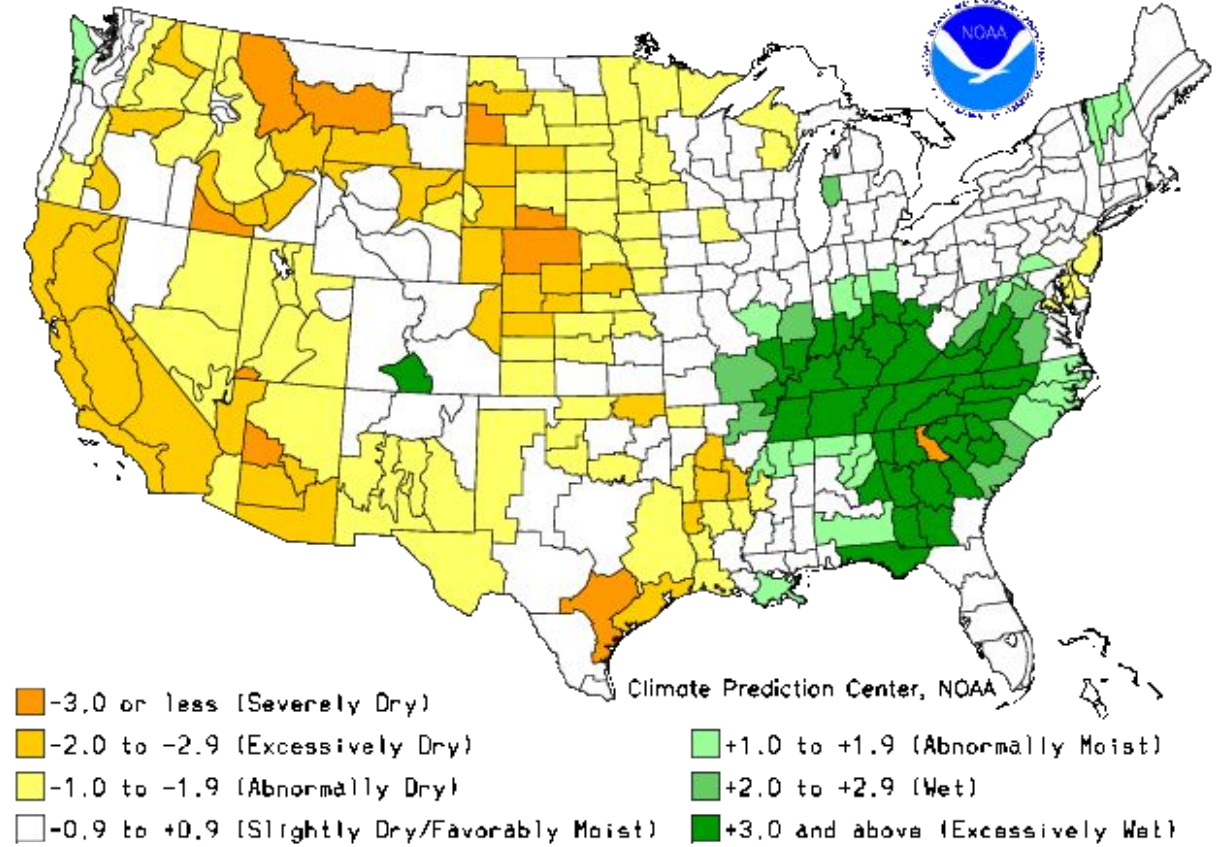




Calculated Soil Moisture Ranking Percentile OCT 09, 2024



Crop Moisture Index by Division Weekly Value for Period Ending OCT 5, 2024 Short Term Need vs. Available Water in a Shallow Soil Profile



Main Takeaways

- Crop moistures over southeast Kansas into western Missouri were slightly dry, worsening in terms of the percentile ranking, with the Soil Moisture Ranking as low as below the 1st percentile.
- South central Missouri into the eastern Ozarks continued to be slightly dry to wet.





8 to 14 Day Outlooks

October 10, 2024
10:26 AM

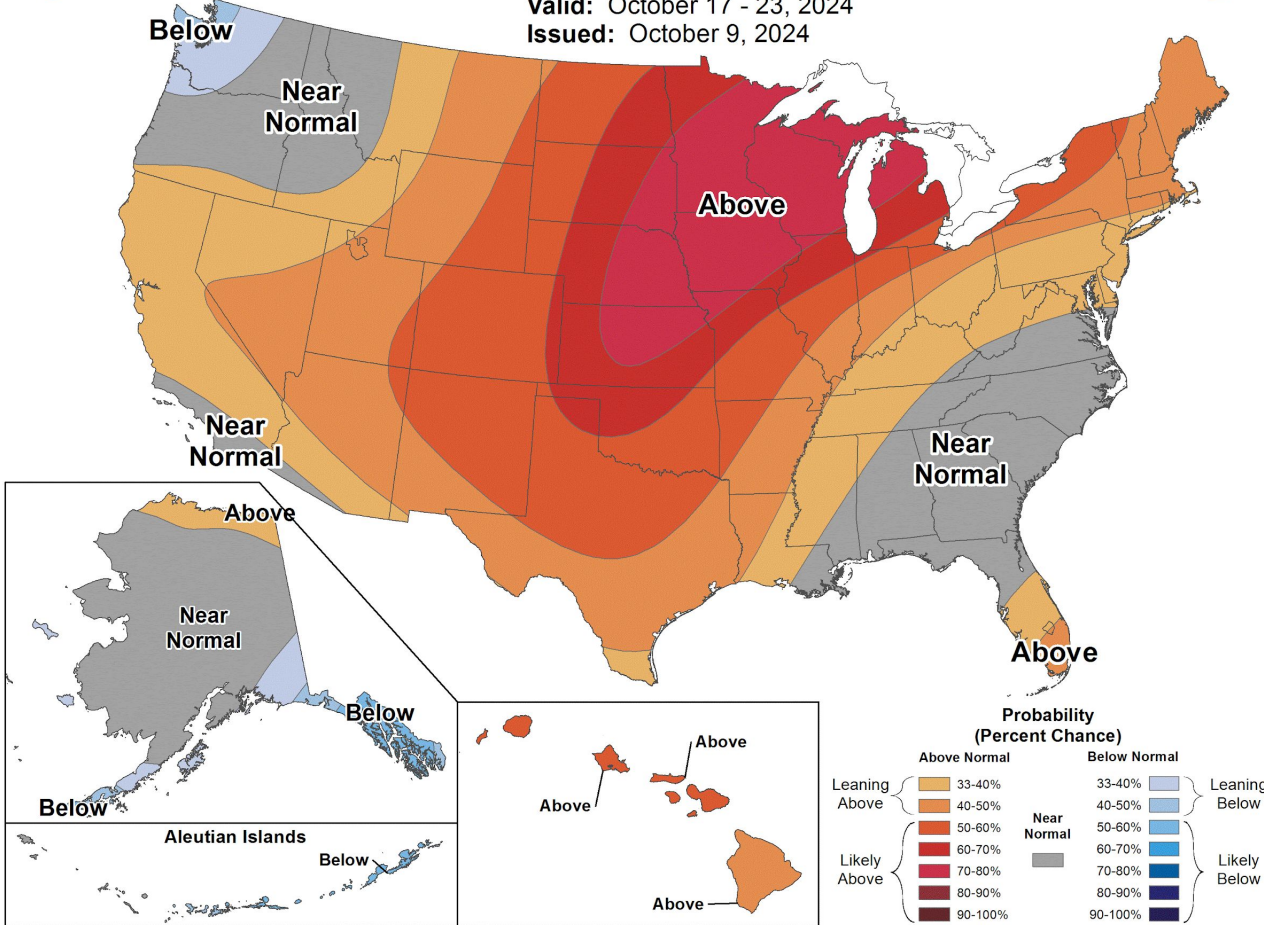
The latest monthly and seasonal outlooks can be found on the [CPC homepage](#)



8-14 Day Temperature Outlook



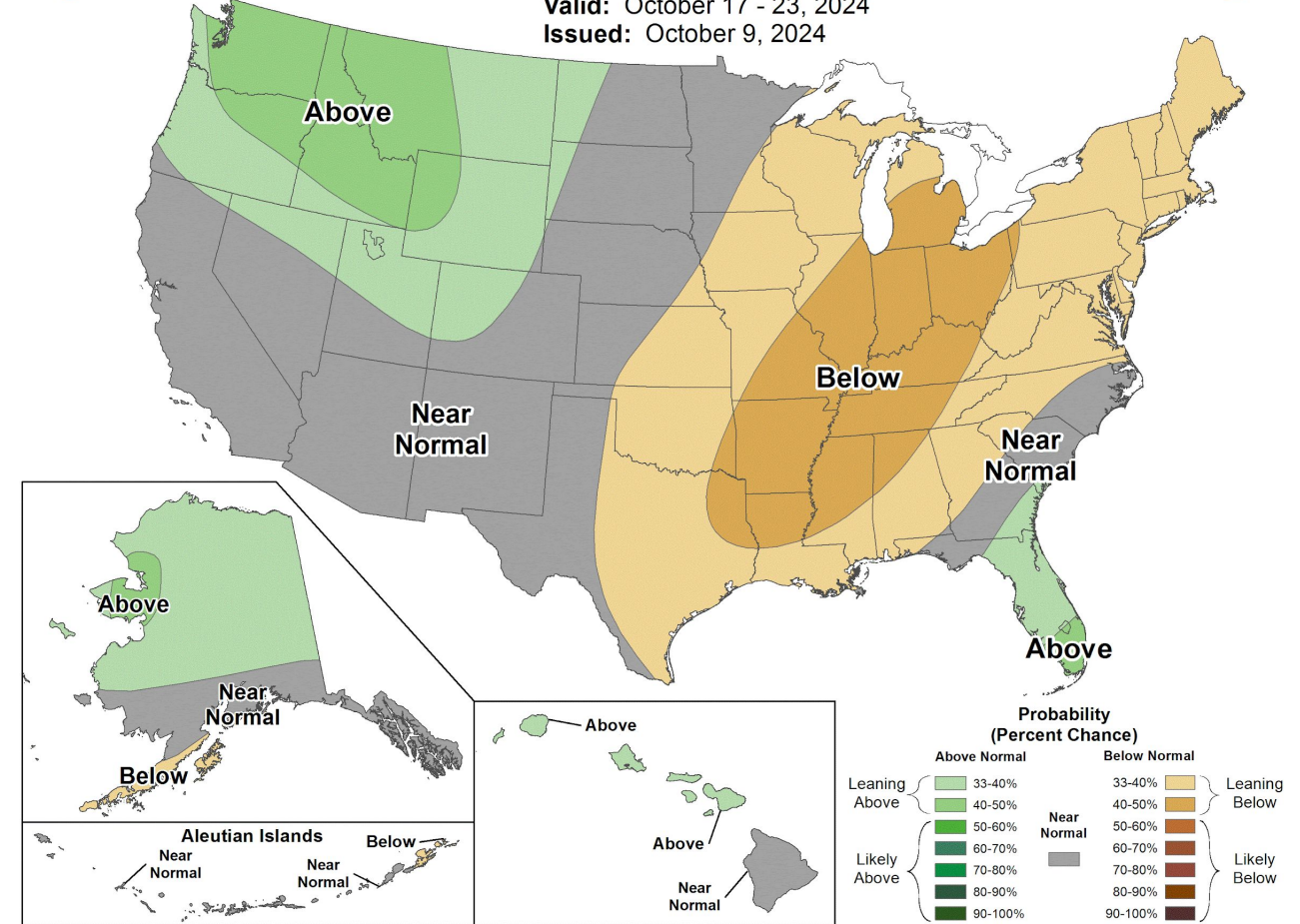
Valid: October 17 - 23, 2024
Issued: October 9, 2024



8-14 Day Precipitation Outlook



Valid: October 17 - 23, 2024
Issued: October 9, 2024



Main Takeaways

- Above normal temperatures look to continue into at least mid to late October.
- A lean to below normal precipitation looks to continue.





October Monthly Outlooks

October 10, 2024
10:26 AM

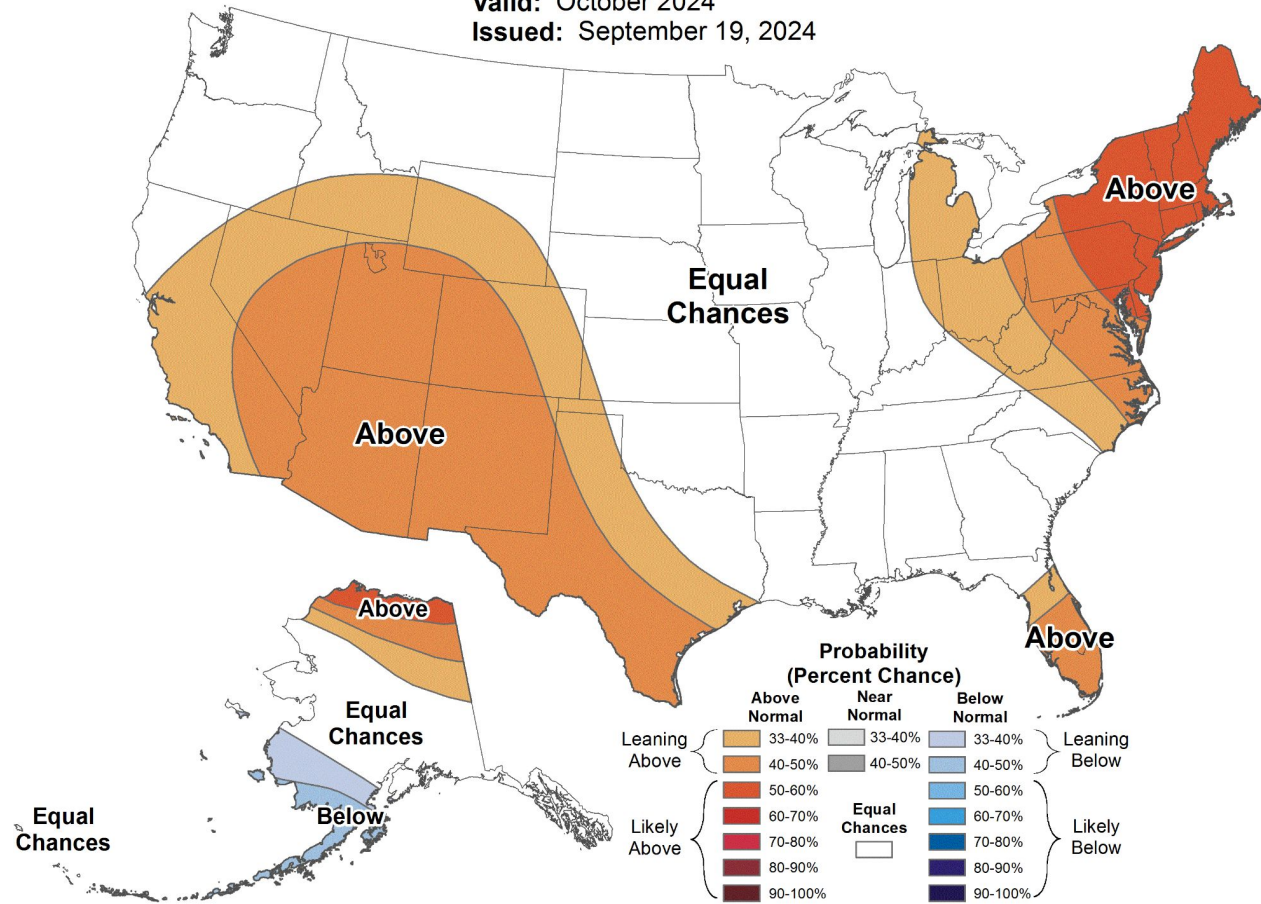
The latest monthly and seasonal outlooks can be found on the [CPC homepage](#)



Monthly Temperature Outlook



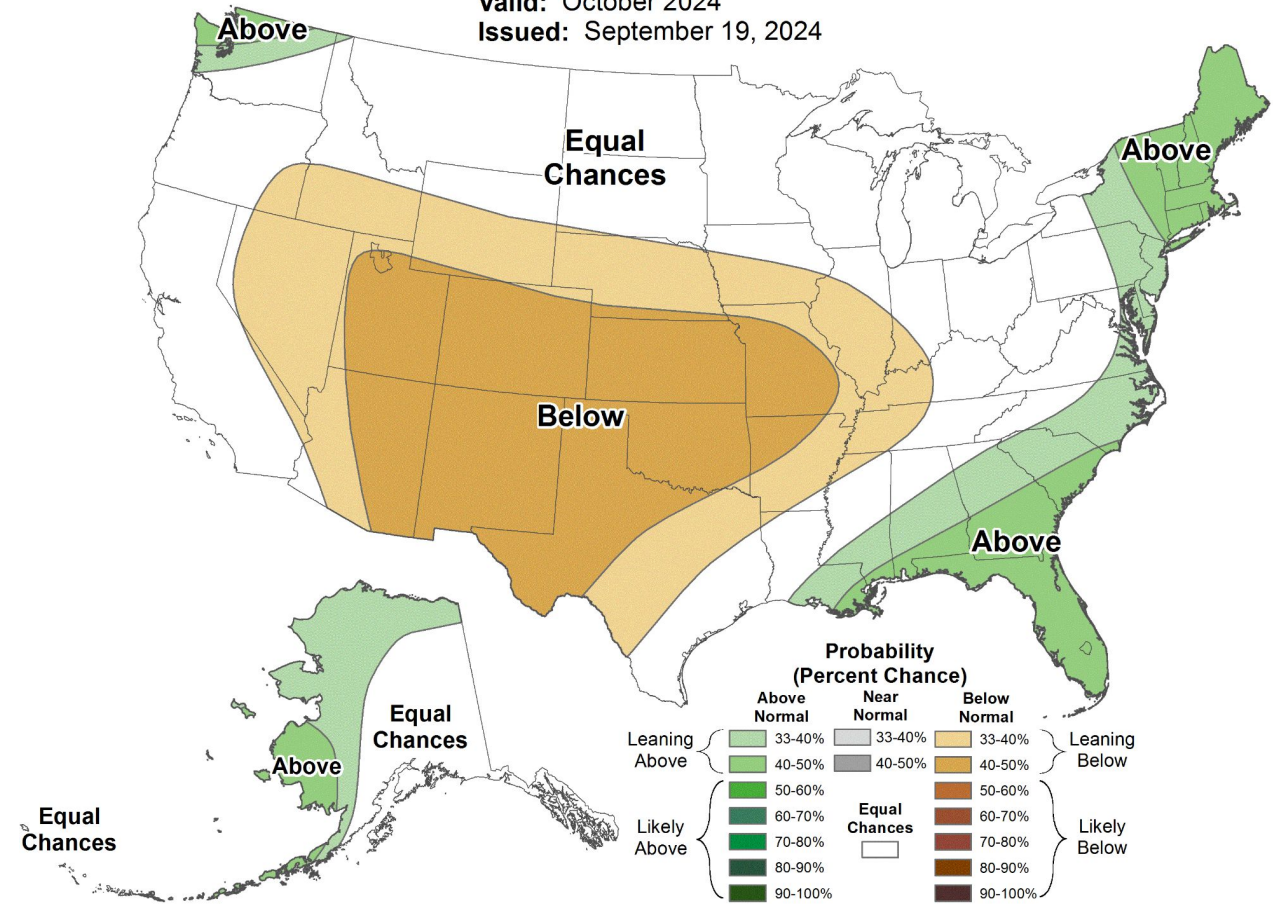
Valid: October 2024
Issued: September 19, 2024



Monthly Precipitation Outlook



Valid: October 2024
Issued: September 19, 2024



Main Takeaways

- The temperature pattern is trending toward equal chances for above, below and average temperatures for the rest of October.
- The precipitation outlook is leaning toward a 40-50% chance for below normal precipitation.





Seasonal Outlooks

October 10, 2024
10:26 AM

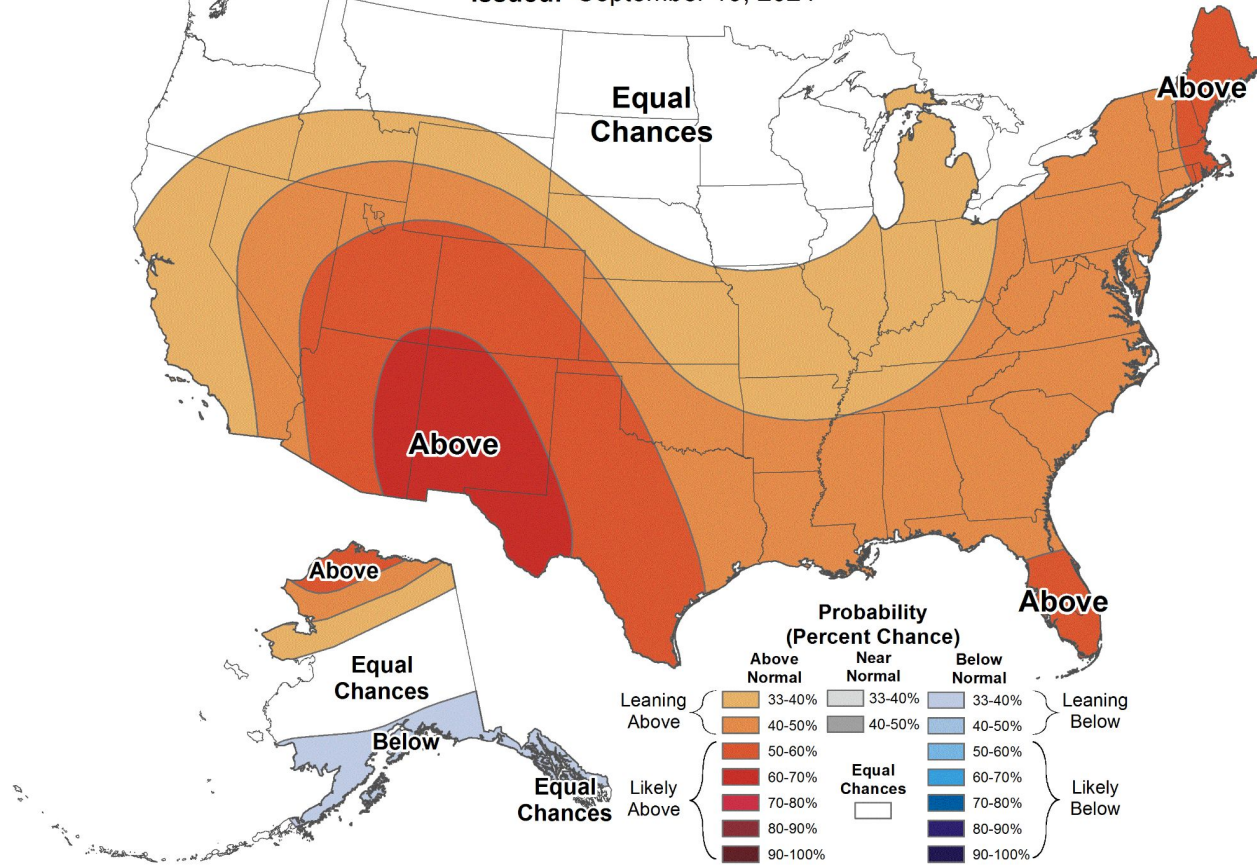
The latest monthly and seasonal outlooks can be found on the [CPC homepage](#)



Seasonal Temperature Outlook



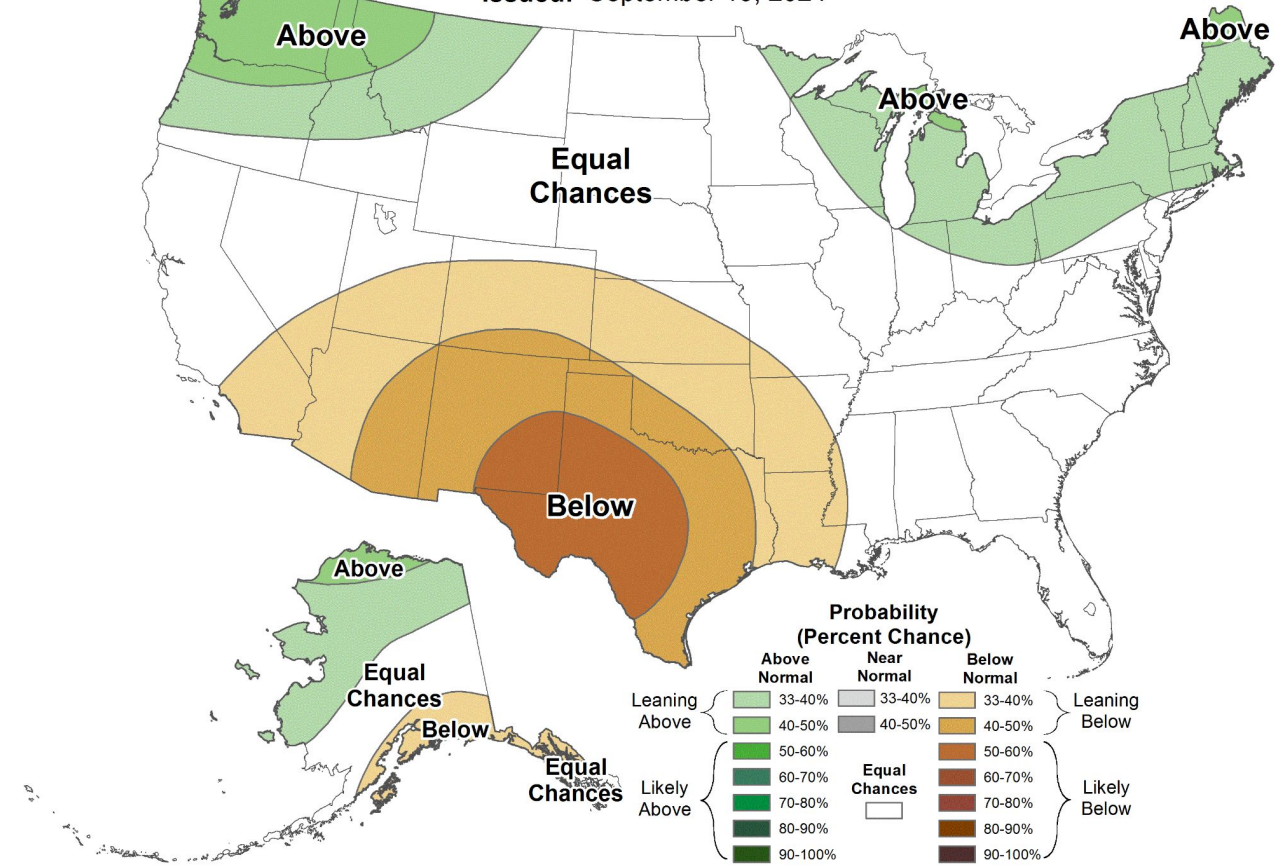
Valid: Oct-Nov-Dec 2024
Issued: September 19, 2024



Seasonal Precipitation Outlook



Valid: Oct-Nov-Dec 2024
Issued: September 19, 2024



Main Takeaways

- After temperatures trended toward equal chances for above/below/average in October, the longer term outlook for November and December slightly favors above average temperatures.
- The precipitation outlook in October favors below average chances, then November and December offers equal chances.





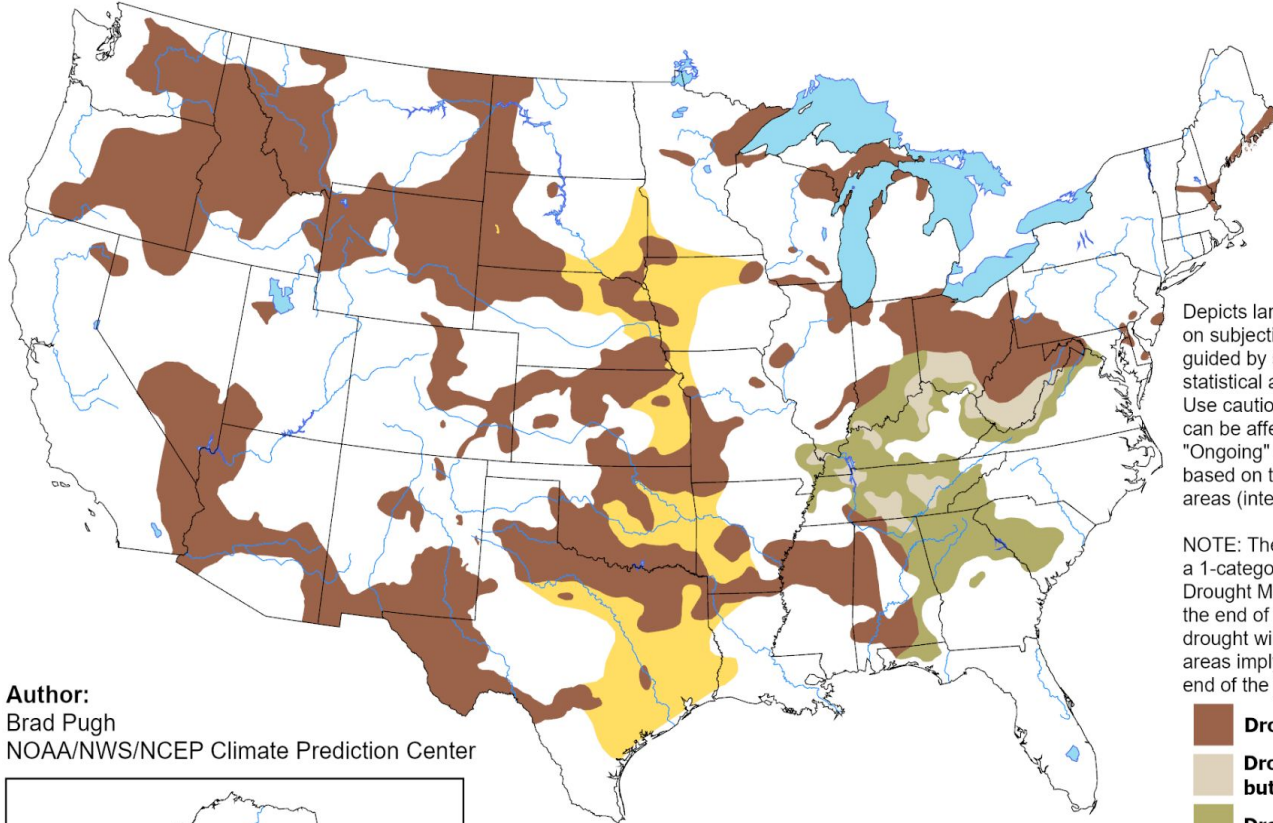
Drought Outlook

October 10, 2024
10:26 AM

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

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

Valid for October 2024
Released September 30, 2024

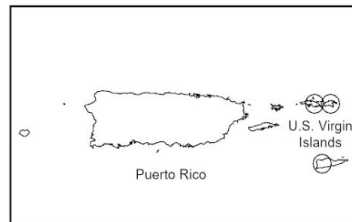
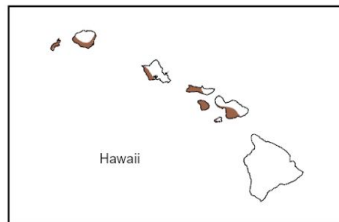


Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to 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).

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

Author:
Brad Pugh
NOAA/NWS/NCEP Climate Prediction Center



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

Main Takeaways

- Monthly drought (not shown) through the the end of the year favors a continued to potentially worsening drought for southeast Kansas into at least western Missouri.
- Impacts over portions of central through south central Missouri may be more limited.



For Additional Information

- [NWS Springfield Webpage | IDSS Point Forecasts](#)
- [NWS Springfield Drought Monitor Resources](#)
- [Graphical Hazardous Weather Outlook](#)
- [Missouri Drought Monitor | Kansas Drought Monitor](#)
- [Drought Monitor Archive](#)
- [CPC Drought Information](#)
- [National Integrated Drought Information System \(NIDIS\)](#)
- [National Drought Mitigation Center \(NDMC\)](#)
- [Missouri USGS Streamflows | Kansas USGS Streamflows](#)
- [Drought Safety](#)

Drought Impacts



Agriculture

Farms, ranches, and grazing lands suffer, and increases the cost of their products



Public Health

A decrease of water can lead to an increase of illness, disease, mortality rates, and adverse mental health



Ecosystems

Harms fish, wildlife, and plants, as well as the benefits these ecosystems provide



Wildfire Management

Dry, hot, and windy weather combined with dried out vegetation can lead to more large-scale wildfires



Manufacturing

Interruptions in the water supply can result in a reduction of productivity or closure of facilities



Energy

Production of all types of energy requires water, and drought can severely impact energy systems and prices



During a Drought be Vigilant

Conserve Water

Practice Fire Prevention

Follow Directions from Local Officials

Trinity Lake, CA, dry lakebed during California Drought, 2014. Photo: USGS



weather.gov/drought

