

# **Drought Information Statement for** the Missouri Ozarks Valid October 3, 2024

Issued By: WFO Springfield, MO Contact Information: contact.sgf@noaa.gov

This product will be updated November 7, 2024 or sooner if drought conditions change significantly. 

- Please see all currently available products at <u>https://drought.gov/drought-information-statements</u>.
- Please visit <u>https://www.weather.gov/sgf/SGFDroughtMonitor</u> for additional information.







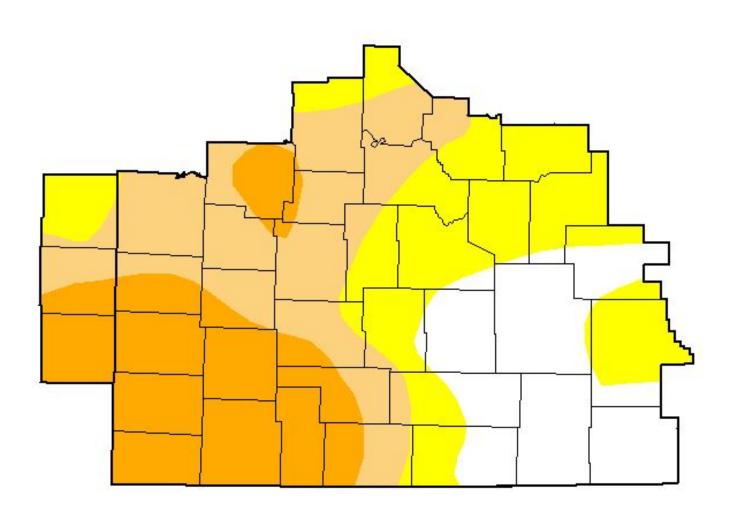
## **U.S. Drought Monitor**

Link to the latest U.S. Drought Monitor for Lower Midwest

• Areas of Severe (D2) drought over far southeastern Kansas and southwestern Missouri expanded eastward. Moderate (D1) mainly persisted, also expanding slightly eastward in southwest Missouri.

### **Drought Intensity and Extent**

- D2 (Severe Drought): All of McDonald, Barry, Newton, Lawrence, and Jasper counties. Portions of St. Clair, Hickory, Cedar, and Polk counties along with parts of Taney, Christian, Greene, Dade, and Barton counties in western MO. All of Cherokee and part of Crawford counties in southeast Kansas.
- D1 (Moderate Drought): All of Vernon county, Ο remaining portions of Crawford, Barton, Dade, Cedar, St. Clair, Hickory, and Christian counties, and part of Taney, Greene, Polk, Dallas, Benton, Morgan, Camden, Miller, Webster, and Douglas counties.





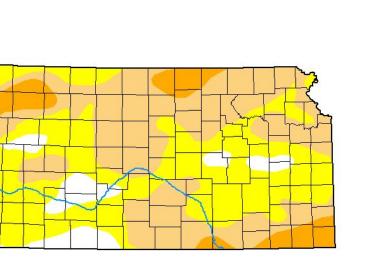
### **October 3, 2024** 9:08 AM



# **State Drought Monitor**

#### Link to Recent Change Maps

U.S. Drought Monitor Kansas



	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	7.48	92.52	50.40	8.34	0.00	0.00
Last Week 09-24-2024	8.77	91.23	46.38	5.90	0.00	0.00
3 Month s Ago 07-02-2024	45.40	54.60	21.29	3.98	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 10-03-2023	17.42	82.58	66.73	48.42	20.60	1.65
ntensity:						
None				02 Seve	re Drou	ight
D0 Abnormally Dry			D3 Extreme Drought			
D1 Mode	rate Dro	ught		04 Exce	ptional	Droug

October 1, 2024

(Released Thursday, Oct. 3, 2024)

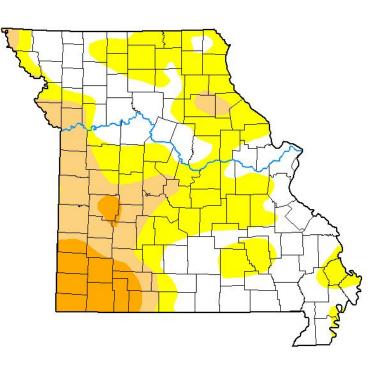
Valid 8 a.m. EDT

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



#### U.S. Drought Monitor Missouri



#### Main Takeaways

- Severe (D2) Drought persisted and expanded into areas of south-central Missouri
- Moderate (D1) drought also spread into portions of south-central Missouri and remained in place elsewhere.



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#### 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	<u>39.30</u>	60.70	23.73	7.95	0.00	0.00	
Last Week 09-24-2024	29.39	70.61	25.89	6.96	0.00	0.00	
3 Month s Ago 07-02-2024	79.93	20.07	<mark>4.4</mark> 1	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	<mark>81.9</mark> 2	54.87	27.22	9.04	0.00	
One Year Ago 10-03-2023	14.59	85.41	59.14	27.48	9.04	0.00	

#### Intensity:

None

D0 Abnormally Dry D1 Moderate Drought

D2 Severe Drought D3 Extreme Drought D4 Exceptional Drought

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#### Author:

**Richard Tinker** CPC/NOAA/NWS/NCEP



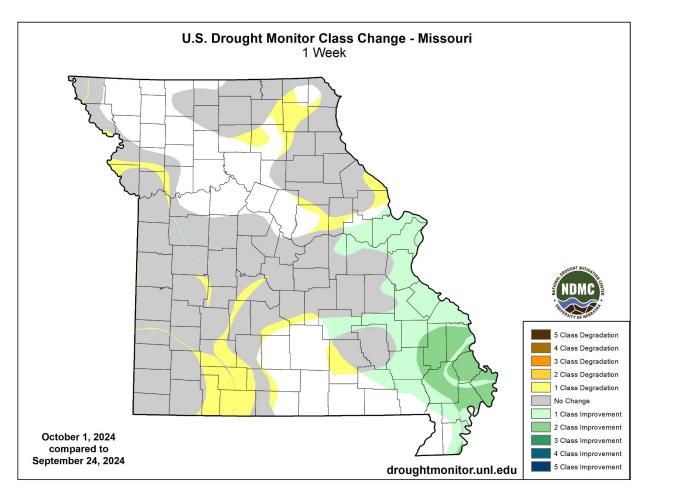
droughtmonitor.unl.edu

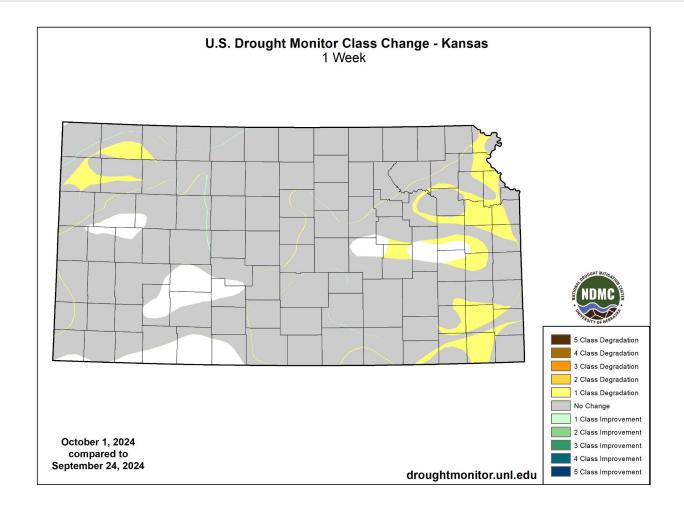




# **Recent Change in Drought Intensity**

#### Link to Recent Change Maps





### Main Takeaways

- Drought conditions have continued to degrade the past week over south-central Missouri
- Southeast Kansas has also seen slight increases in drought.
- Areas across west Missouri saw no change over the past month, but are still in Severe (D2) Drought.

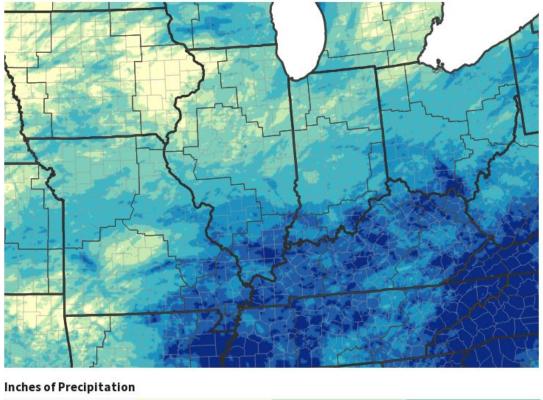


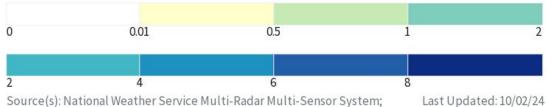
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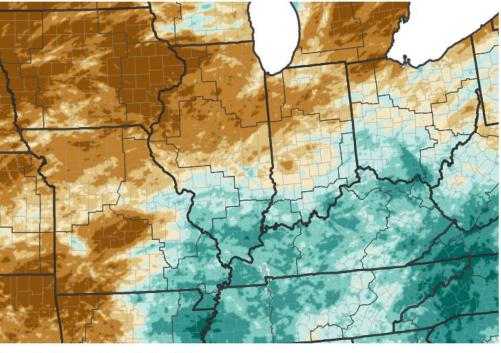
# Precipitation

#### **30-Day Precipitation Accumulations (Inches)**





#### **30-Day Percent of Normal Precipitation**



Percent of Normal Precipitation (%)

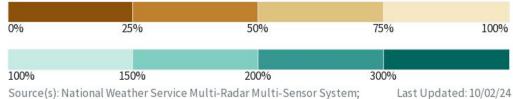


image courtesy of Drought.gov

#### 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 normal rain...with some receiving less than 25% of normal over the past month.



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# Hydrologic Conditions and Impacts

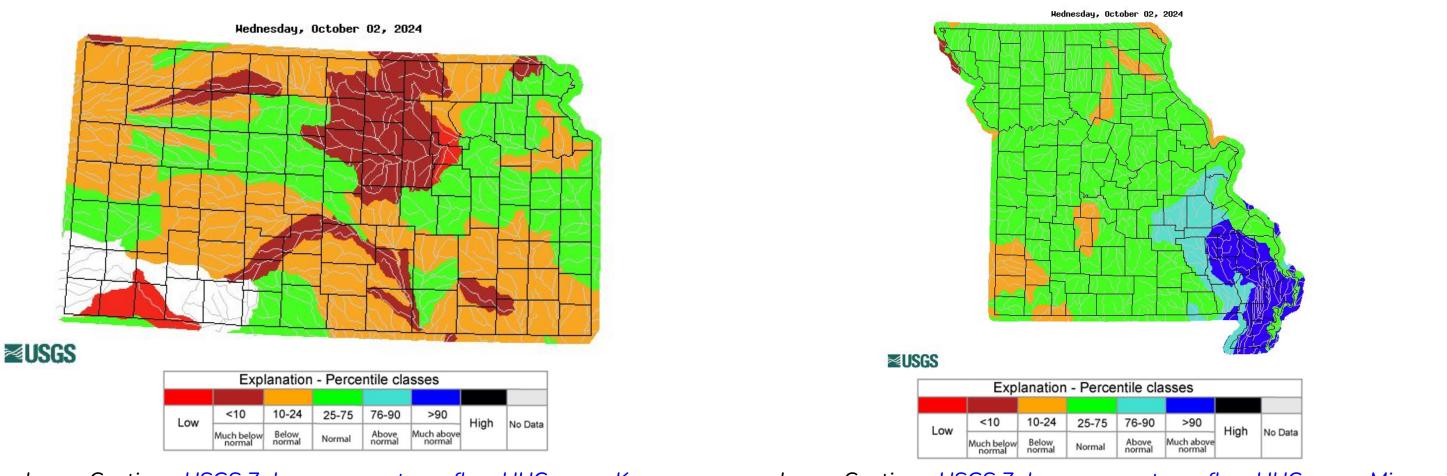


Image Caption: : <u>USGS 7 day average streamflow HUC map - Kansas</u>.

Image Caption: : USGS 7 day average streamflow HUC map - Missouri.

#### Main Takeaways

- Streamflows over the past week over Southeast Kansas into western Missouri have have slightly improved, but still have as little as 10-24% of normal for Spring River and parts of the Neosho and Elk river basins.
- Sufficient rain and spring-fed streams over much of Missouri remained at 25-75% of normal flow.



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sses				
>90	High			
Much above normal	High	No Data		



## **Fire Hazard Impacts**

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

#### Main Takeaways

**CHANGE FROM LAST WEEK:** The NICC removed us from above normal Significant Wildland Fire Potential for October. However, with potential drought expansion, portions of the Ozarks may still experience slightly increased risk of wildland fire potential.





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## Summary of Impacts

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

### Hydrologic Impacts

Significant rainfall deficients 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 very 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 and fire starts.

#### **Other Impacts**

There are no additional known impacts at this time.



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### **Mitigation actions**

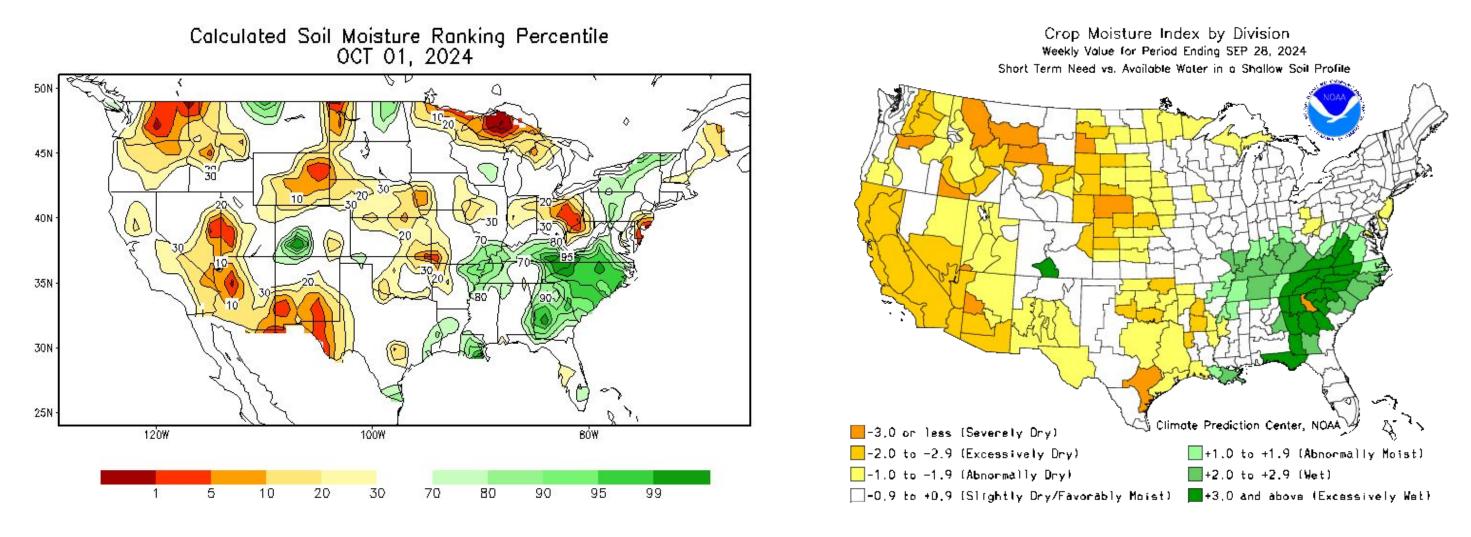
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The Missouri Department of Agriculture has an AgriStress Helpline at 833-897-2474.

The University of Missouri Extension Office has set up a **Psychological Service Clinic to** aid farmers and ranchers.

More information is available at muext.us/PSCFarmRanch.





#### Main Takeaways

- Crop moistures over southeast Kansas into western Missouri were around normal for this time of year, but slightly worsened in terms of the percentile ranking...with the Soil Moisture Ranking as low as below the 5th percentile.
- South central Missouri into the eastern Ozarks continued to be slightly dry to favorably moist.

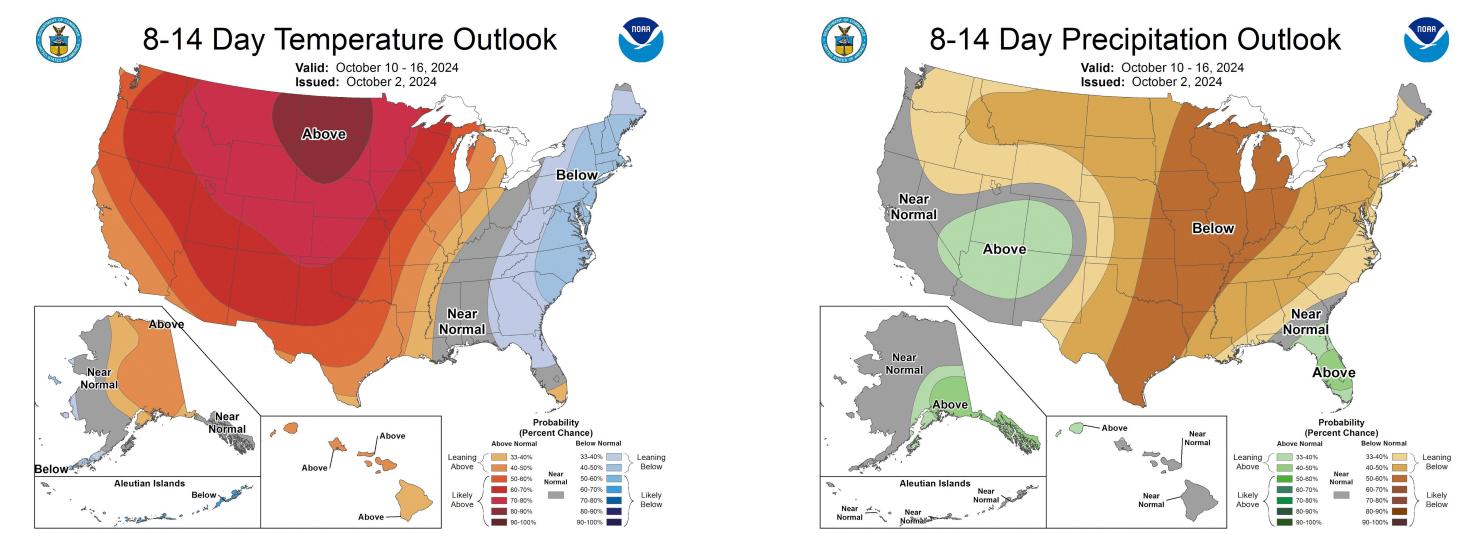


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The latest monthly and seasonal outlooks can be found on the CPC homepage



#### Main Takeaways

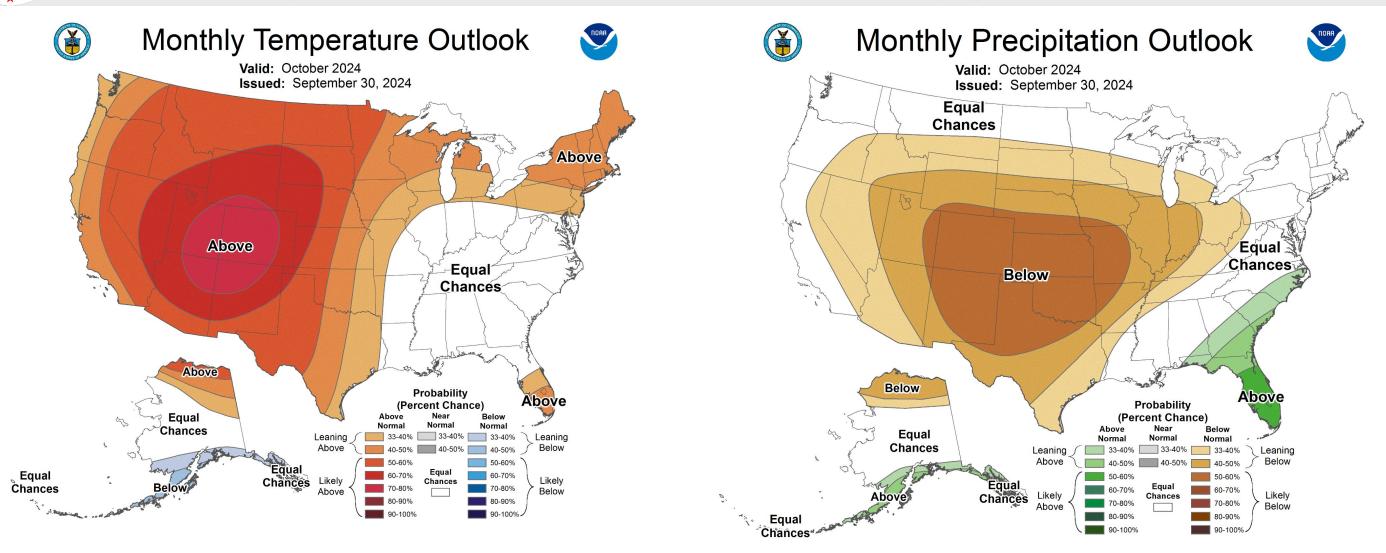
- Above normal temperatures look to continue into at least mid-October.
- Precipitation favors a below normal outlook



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# **October Monthly Outlooks**

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



#### Main Takeaways

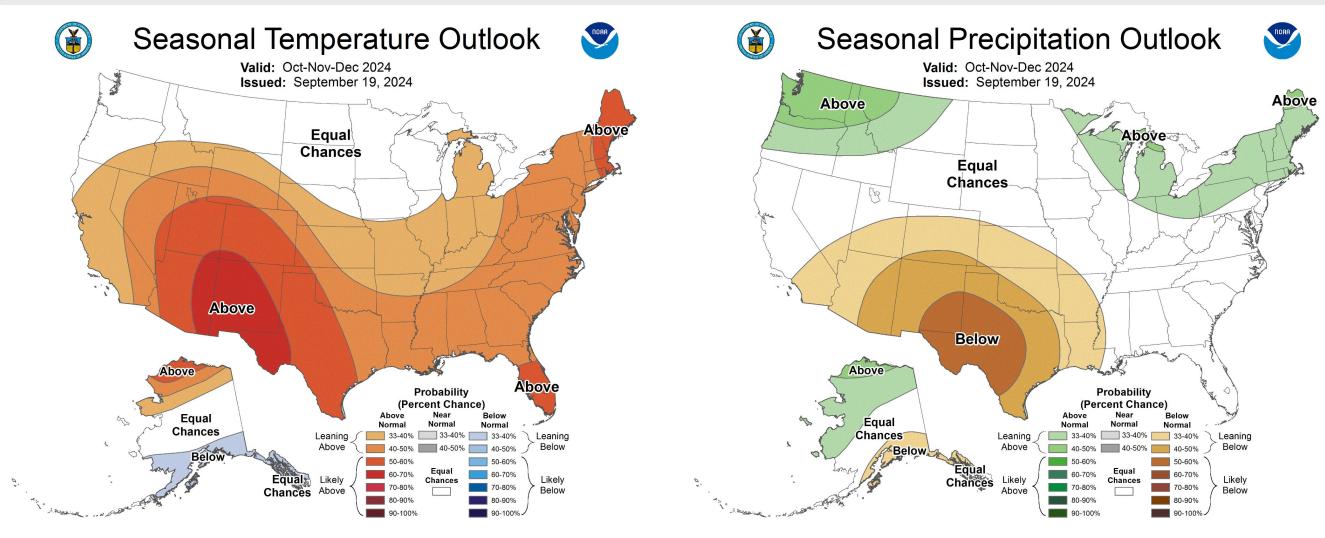
- The temperature pattern is leaning toward a 33-40% chance for above normal temperatures for October.
- The precipitation outlook favors a continued below normal amount of rainfall in October, with increased chances from last outlook.



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# Seasonal Outlooks

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



#### Main Takeaways

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

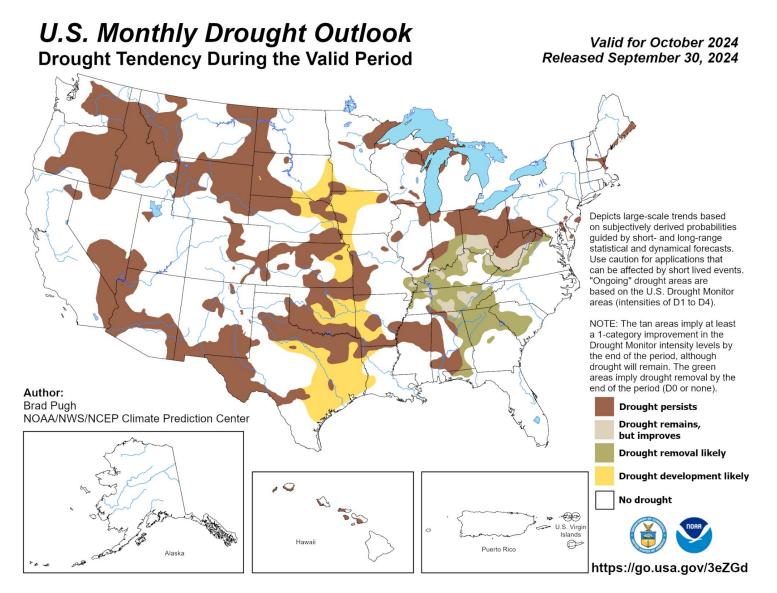


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## **Drought Outlook**

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



#### 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 central through south central may be more limited.



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# **Additional Drought Resources**

## **For Additional Information**

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





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



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



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

## 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



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#### **Public Health**

A decrease of water can lead to an increase of illness



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



#### Energy

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





