Drought Information Statement for MONTANA

Valid: August 30, 2024

Issued By: NWS Great Falls, NWS Missoula, NWS Glasgow, NWS Billings

Contact Information:

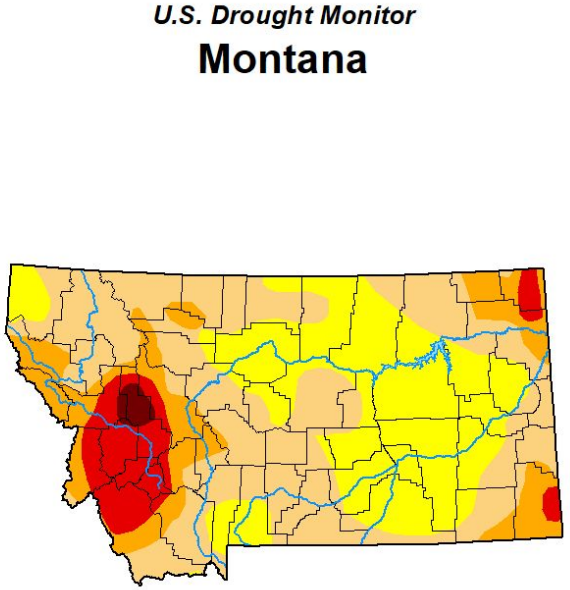
- This product will be updated, September 30, 2024 or sooner, if drought conditions change significantly.
- Please see all currently available products at https://drought.gov/drought-information-statements.
- Please visit https://www.weather.gov/TFX/DroughtInformationStatement for previous statements.

- D4 - Exceptional drought conditions continue across a portion of western Montana.
- D3 - Extreme drought conditions continue across an area of western MT, with isolated areas having developed in far northeastern and far southeastern MT.

U.S. Drought Monitor

Link to the latest U.S. Drought Monitor for Montana

- Drought intensity and Extent
  - **D4 (Exceptional Drought)**: Isolated area in western MT
  - **D3 (Extreme Drought)**: A portion of western MT and isolated areas in eastern MT
  - **D2 (Severe Drought)**: Portions of western, central, and eastern MT, with isolated areas in north central MT
  - **D1 (Moderate Drought)**: Portions of western, north central, central, southwestern and eastern MT
  - **D0: (Abnormally Dry)**: The remainder of the state



August 27, 2024

(Released Thursday, Aug. 29, 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	65.92	22.98	9.00	0.90
Last Week 08-20-2024	0.00	100.00	62.51	22.18	7.86	0.90
3 Months Ago 05-28-2024	43.82	56.18	37.52	7.87	0.09	0.00
Start of Calendar Year 01-02-2024	39.20	60.80	21.30	2.68	0.00	0.00
Start of Water Year 09-26-2023	56.28	43.72	37.28	23.21	9.51	0.00
One Year Ago 08-29-2023	51.87	48.13	38.79	26.29	8.91	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:

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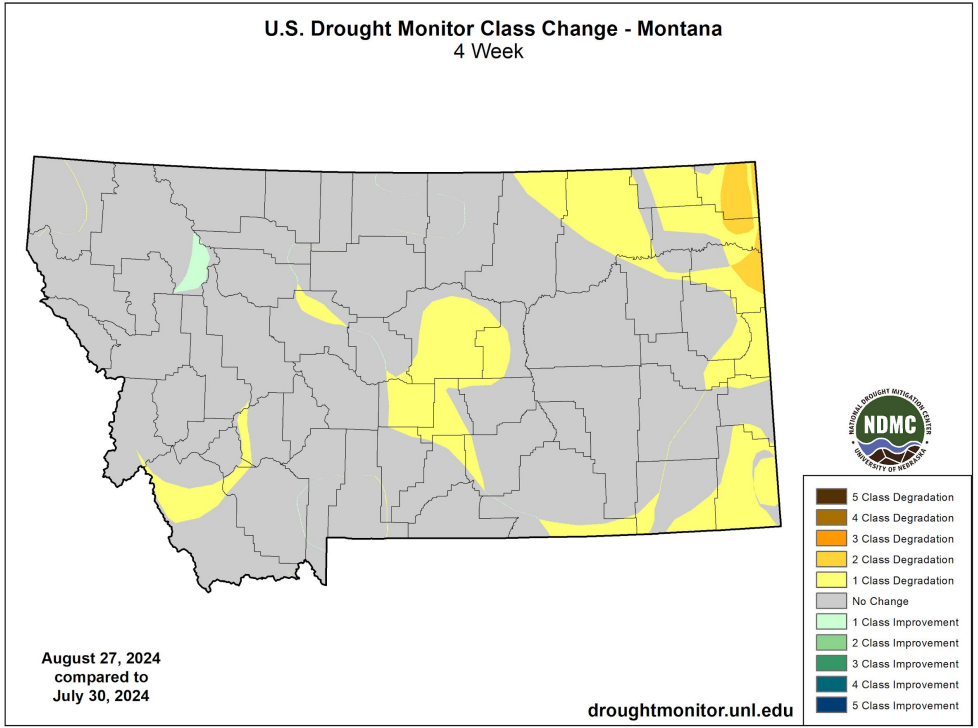
NCEI/NOAA

droughtmonitor.unl.edu

Recent Change in Drought Intensity

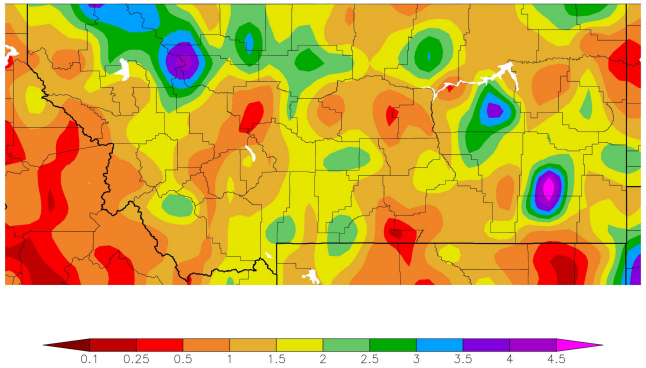
Link to the latest 4-week change map for Montana

- Four Week Drought Monitor Class Change
  - **Drought Worsened:** Across isolated areas of central and southwestern MT, as well as portions of eastern MT, during the past four weeks.
  - **No Change:** No change in drought conditions, over the past month, were observed over most of the state.
  - **Drought Improved:** An Isolated area of improvement occurred in northwestern MT.



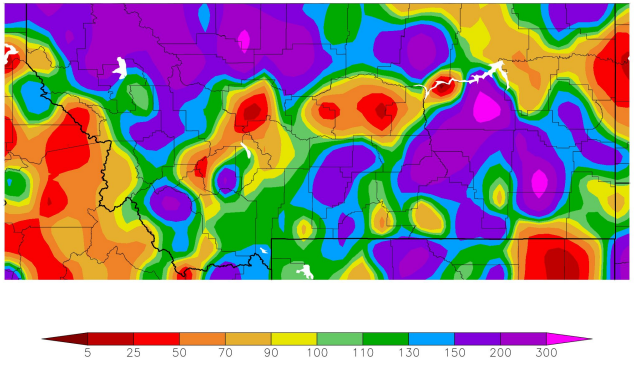
Precipitation

Precipitation (in)
7/31/2024 – 8/29/2024



Generated 8/30/2024 at HPRCC using provisional data. NOAA Regional Climate Centers

Percent of Normal Precipitation (%)
7/31/2024 – 8/29/2024



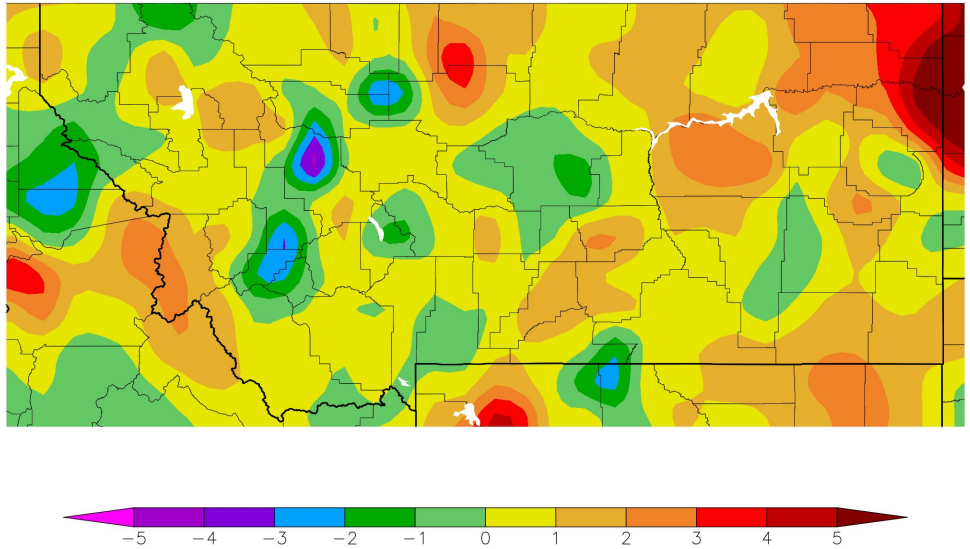
Generated 8/30/2024 at HPRCC using provisional data. NOAA Regional Climate Centers

- **Precipitation (in):** During the past month, most of the state received 1.0” to 2.0” of precipitation, with some areas receiving more than 2.0” of moisture. Some areas of the state received less than 1.0” of precipitation.
- **Percent of Normal Precipitation (%):** Most of the state received above normal precipitation, while some areas received below normal precipitation amounts.

Temperature

- Most of The Treasure State experienced normal to warmer than normal temperatures, with far northeastern MT experiencing a greater than 5F warm departure from normal.
- Some isolated areas received cooler than normal temperatures.

Departure from Normal Temperature (F)
7/31/2024 – 8/29/2024



Generated 8/30/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

Hydrologic Conditions and Impacts

- **Above Normal:** Portions of the Jefferson and the Lower Yellowstone Basins, with a portion of the Milk Basin over northwestern Valley County in the, “much above normal,” percentile class.
- **Normal:** The average streamflow for much of MT, is at a level that is considered, “normal.”
- **Below Normal:** A large portion of the state is experiencing, “below normal,” stream flow, with isolated areas of western, northern and central MT in the, “much below normal,” range. Isolated areas of The Milk River Basin in north central MT, continue within the, “low,” average streamflow percentile class.

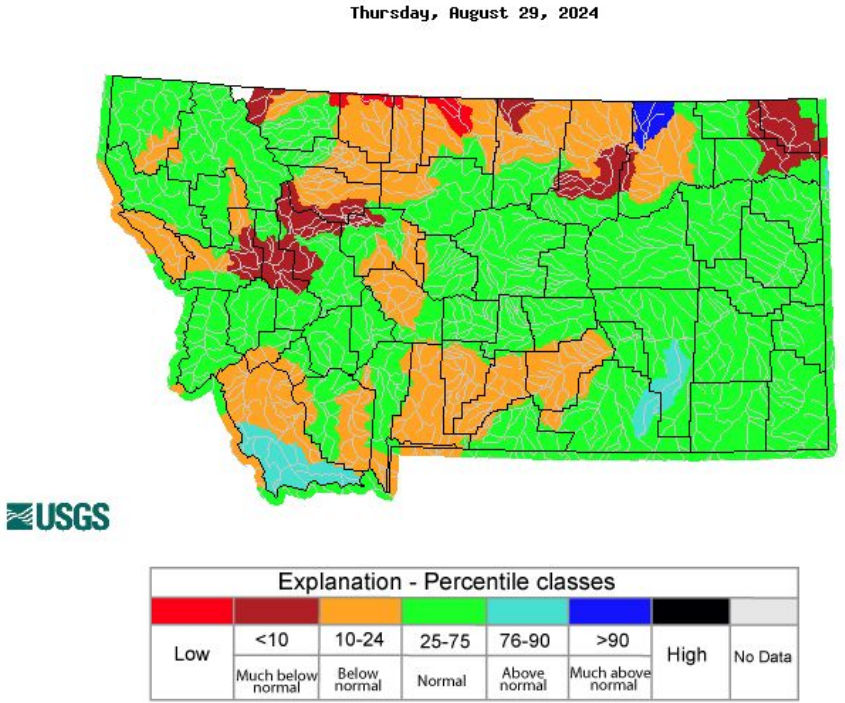
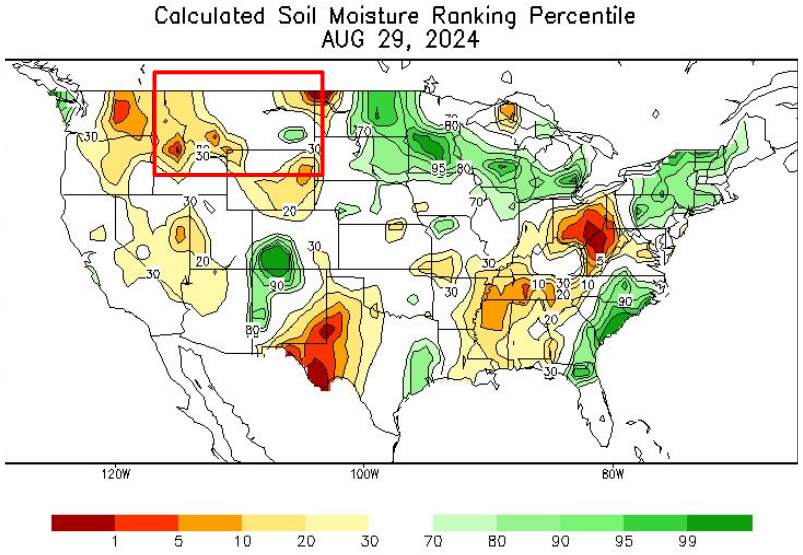
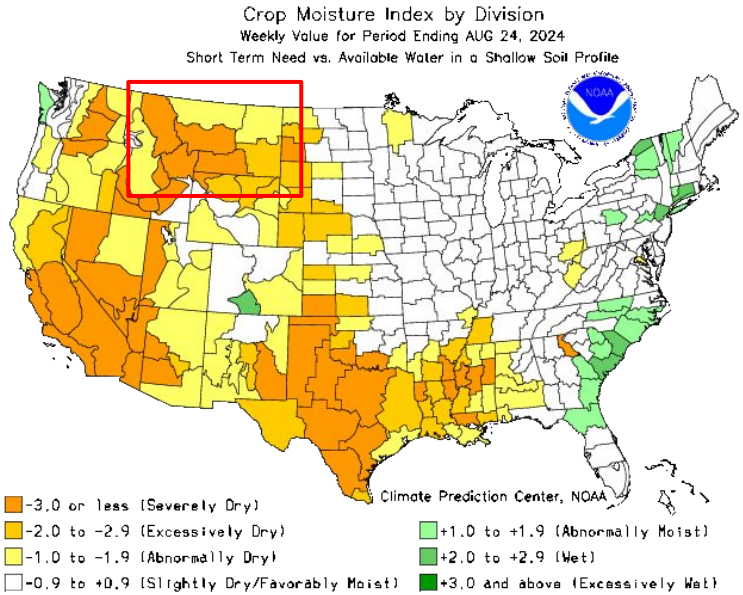


Image Caption: USGS 7-day Average Streamflow HUC Map, valid: August 29, 2024

Agricultural Impacts



- The Soil Moisture Ranking Percentile resides in the lower range across western, southwestern and portions of northeastern MT, with an isolated higher range area located in southeastern MT. The remainder of the state ranks in the 30 to 70 percentile range.

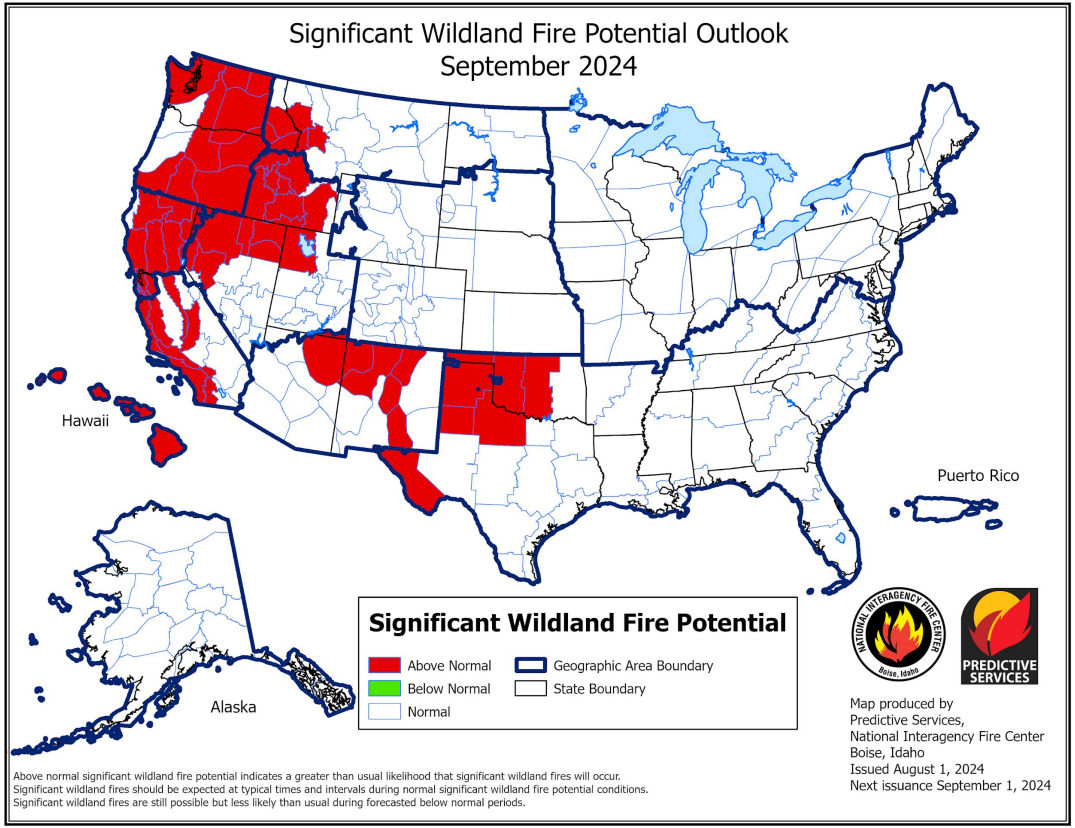


- The Crop Moisture Index includes western, central and much of southern MT in an area identified as, “severely dry,” while soil moisture values for southeastern MT are, “excessively dry.” North central and northeastern MT are considered, “slightly dry/favorably moist.”

Fire Hazard Impacts

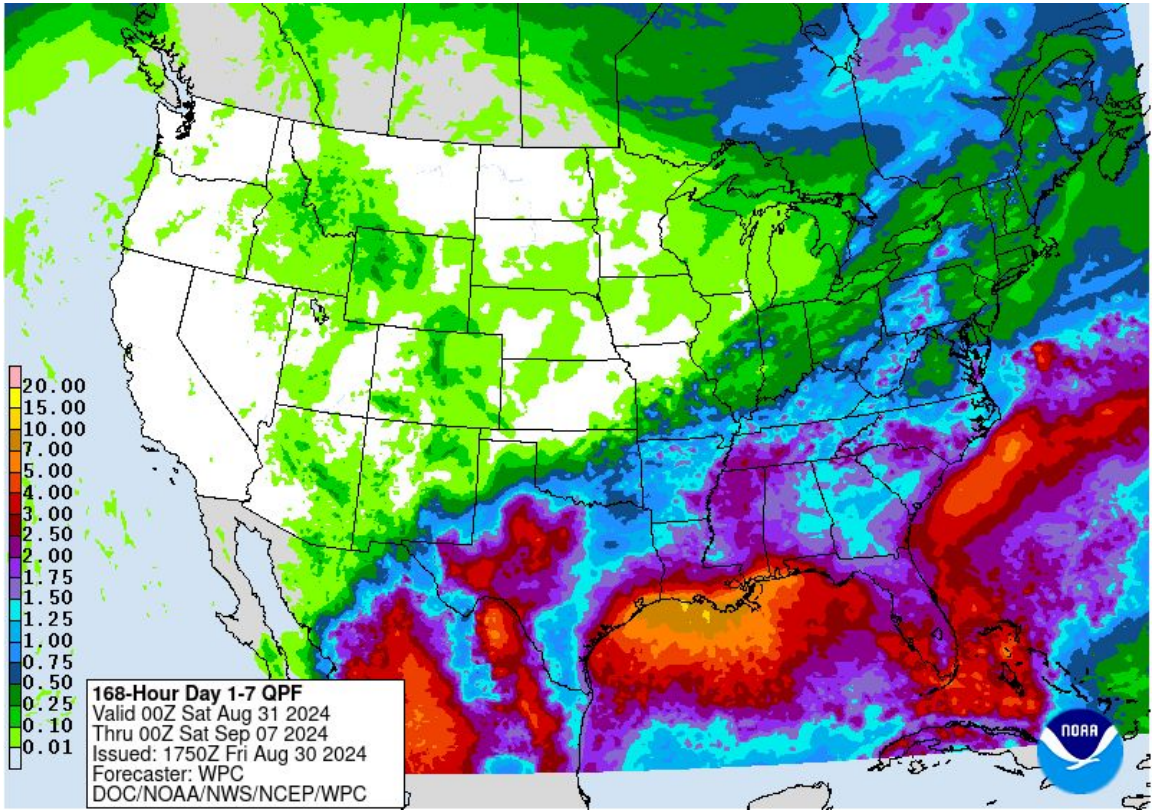
Link to [Wildfire Potential Outlooks from the National Interagency Coordination Center.]

- For the month of September, a portion of western MT is included in an area of above normal significant wildland fire potential conditions. There is a greater than usual likelihood that significant wildland fires will occur.
- The rest of the state is included in an area of normal significant wildland fire potential conditions. Significant wildland fires should be expected at typical times and intervals.



Seven Day Precipitation Forecast

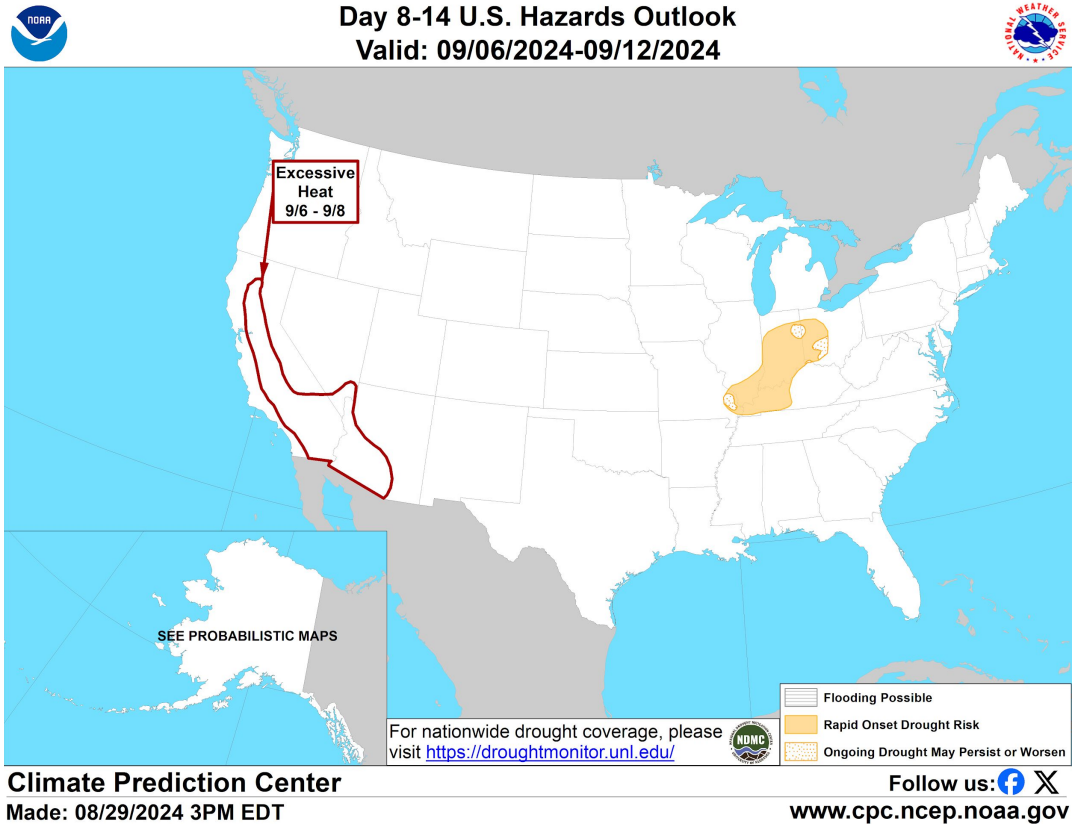
- During the week of, August 31 to September 7, 2024, much of northern and eastern MT is forecast to remain dry.
- The remainder of the state is, generally, forecast to receive up to 0.1” of liquid precipitation. Some mountains may receive up to 0.25”, during this period.



Rapid Onset Drought Outlook

Links to the latest Climate Prediction Center 8 to 14 day Temperature Outlook and Precipitation Outlook.

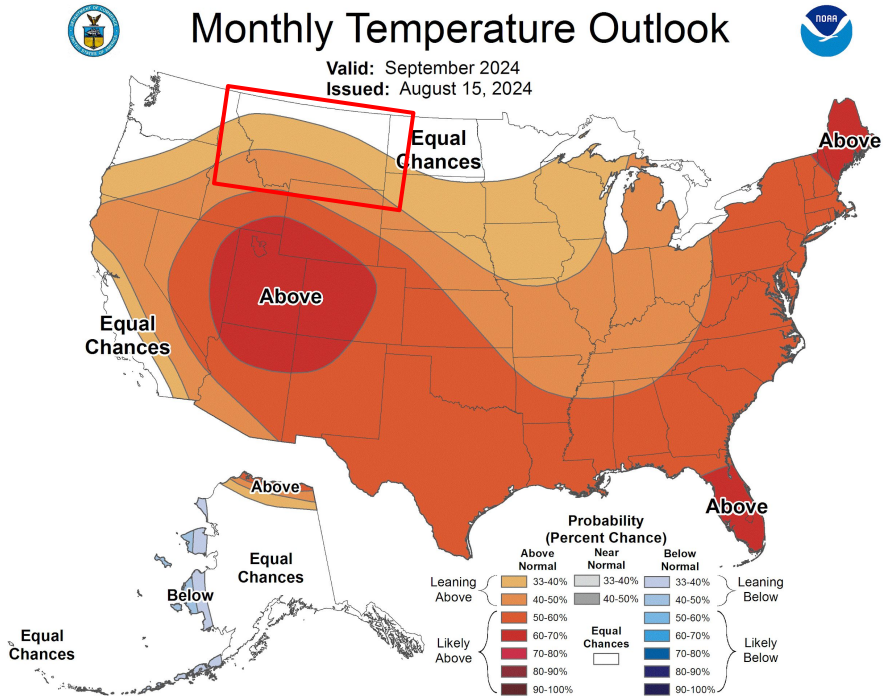
- As of this time, no significant hazards are forecast to occur across The Treasure State from, September 6th to 12th.



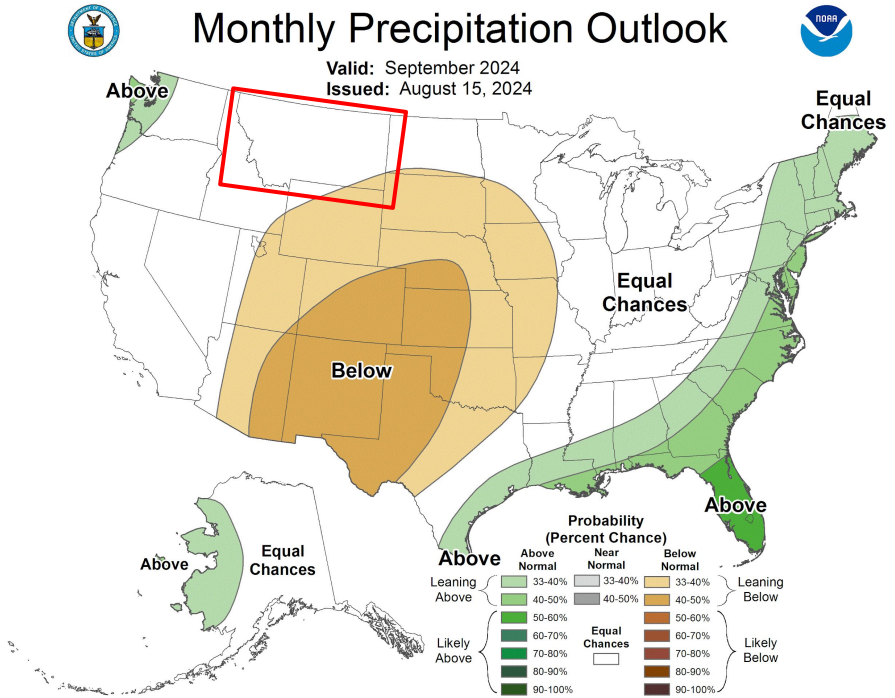
Long Range Outlooks

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

- Looking ahead to next month, there is a higher probability for most of MT to experience warmer than normal temperatures, with the northern portion of the state in an area of equal chances for above or below normal temperatures.



- Virtually statewide, the Precipitation Outlook shows equal chances for above or below normal precipitation for the month of September.

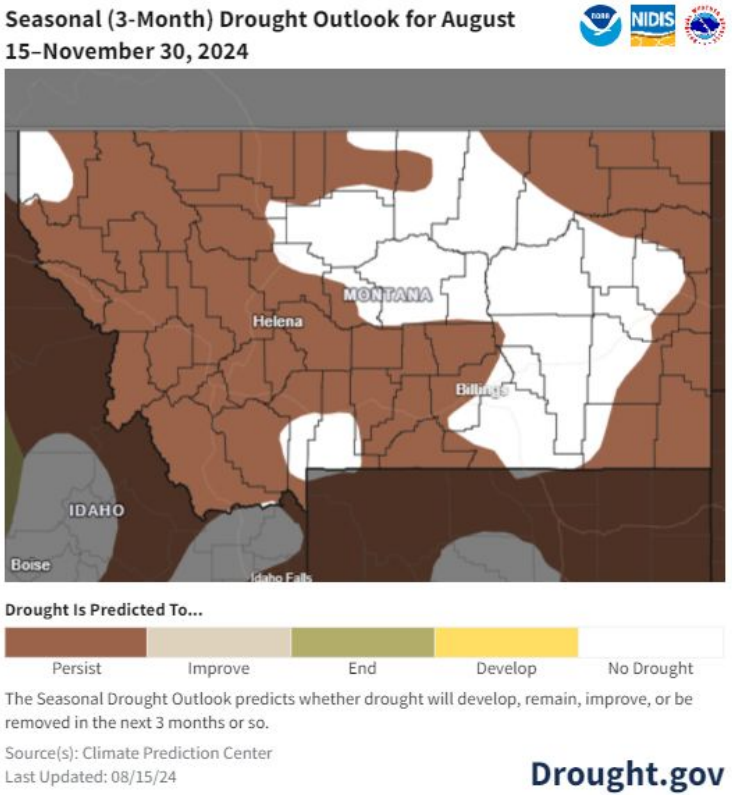


Drought Outlook

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

- **Persisting:** Drought conditions are predicted to persist across most of the state.
- **Developing:** None
- **Improving:** None
- **Ending:** None
- **No Drought:** Isolated areas of northwestern and southwestern MT, with a large area, including portions of north central, central and eastern MT, included in an area of, “no drought.”

https://www.drought.gov/states/montana



Links to the latest:
Climate Prediction Center Monthly Drought Outlook
Climate Prediction Center Seasonal Drought Outlook

Summary of Impacts

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

Hydrologic Impacts

- More than 37% of the state of Montana is reported, “moderately dry,” with an additional, greater than 41% reported, “severely dry.”
  Montana State Library | National Drought Mitigation Center. 2024. Drought Impacts. [accessed August 30, 2024].
  https://storymaps.arcgis.com/stories/76204aa1271a4a7f8a775fc2bba9ef83

Agricultural Impacts

- Impacts to crops and grasslands

Fire Hazard Impacts

- Persistent drought and dead fuels, cause ongoing fire impacts.

Other Impacts

- Heavy downpours in association with thunderstorm activity can cause flash flooding.
- Impacts to outdoor recreation

Mitigation Actions

- We continue to monitor potential drought and flooding impacts.
- Messaging concerns to the public is essential to public safety, and as such, remains a high priority.