



Drought Information Statement for MONTANA

Valid: November 8, 2024

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

Contact Information:

- This product will be updated, December 6, 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 areas of western and eastern MT.





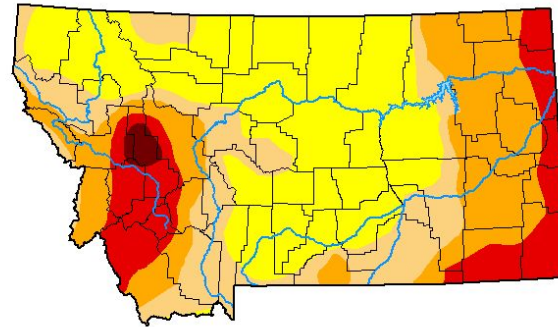
U.S. Drought Monitor

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)**: Portions of western and eastern MT
- **D2 (Severe Drought)**: Portions of western, central, south central and eastern MT
- **D1 (Moderate Drought)**: Portions of western, north central, central, southern and eastern MT
- **D0: (Abnormally Dry)**: The remainder of the state

U.S. Drought Monitor Montana



November 5, 2024
(Released Thursday, Nov. 7, 2024)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	58.27	37.69	13.96	0.90
Last Week 10-29-2024	14.53	85.47	55.10	35.67	13.88	0.90
3 Months Ago 08-06-2024	0.00	100.00	61.61	19.27	7.04	0.90
Start of Calendar Year 01-02-2024	39.20	60.80	21.30	2.68	0.00	0.00
Start of Water Year 10-01-2024	15.18	84.82	42.24	21.05	9.44	0.90
One Year Ago 11-07-2023	66.72	33.28	26.21	12.31	0.61	0.00

Intensity:



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 Drought Mitigation Center



droughtmonitor.unl.edu

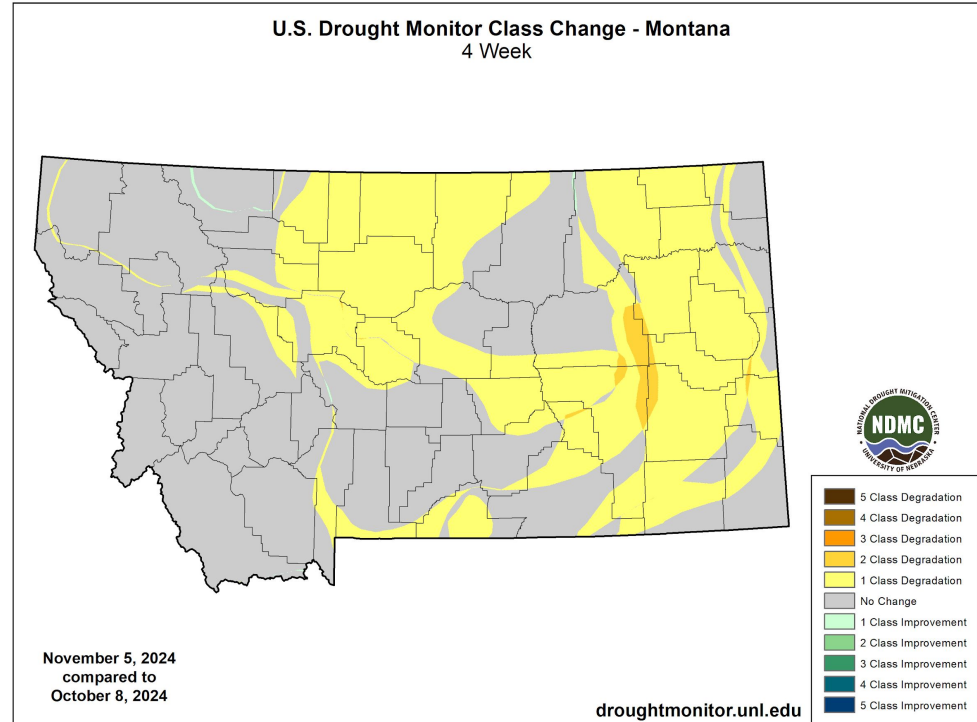




Recent Change in Drought Intensity

Link to the latest [4-week change map](#) for Montana

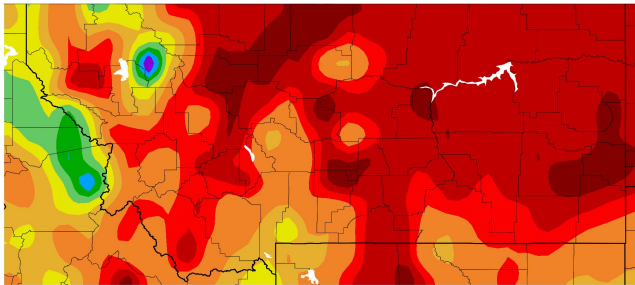
- Four Week Drought Monitor Class Change
 - **Drought Worsened:** Across isolated areas of western MT, with much of the region east of the divide showing condition degradation, during the past four weeks.
 - **No Change:** No change in drought conditions, over the past month, were observed over most of western and southwestern MT, with areas of the remainder of the state showing, "no change," as well.
 - **Drought Improved:** Statewide, little to no improvement to drought conditions.





Precipitation

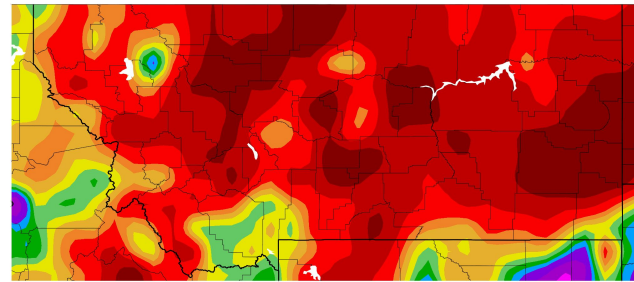
Precipitation (in)
10/9/2024 – 11/7/2024



Generated 11/8/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

Percent of Normal Precipitation (%)
10/9/2024 – 11/7/2024



Generated 11/8/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

- **Precipitation (in):** During the past month, Isolated portions of northwestern MT received more than 3.0” of precipitation; however, the remainder of the state received less than 3.0” of moisture, with some areas receiving less than 0.1”.
- **Percent of Normal Precipitation (%):** The majority of the state has received well below normal precipitation, with a few small isolated areas listed in the above normal range.

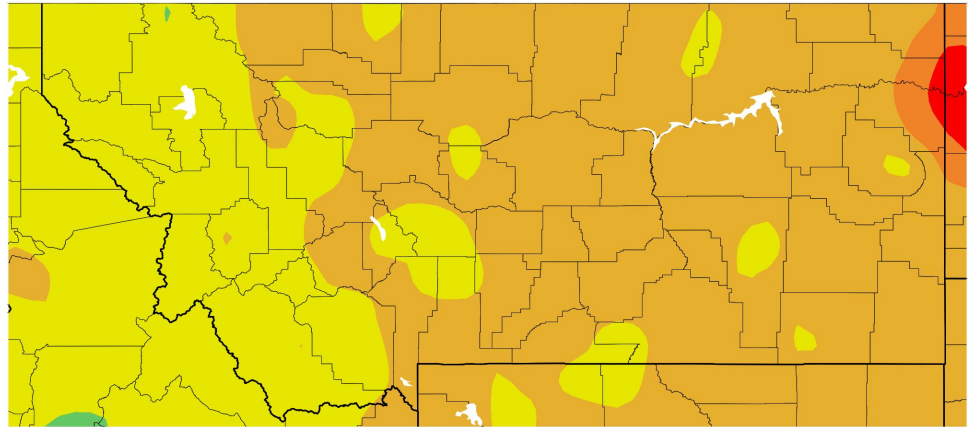




Temperature

Departure from Normal Temperature (F) 10/9/2024 – 11/7/2024

- The temperatures recorded across western MT range near normal to a few degrees above, while the remainder of the state, generally, ranges 4F to 8F above normal. An isolated portion of far northeastern MT is recorded as 8F to 16F above normal.
- During the period of the last month, there are no portions of The Treasure State that are recorded as cooler than normal.



Generated 11/8/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

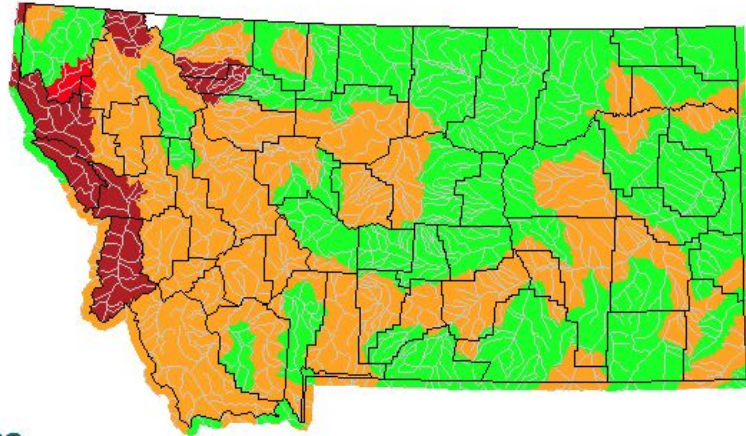




Hydrologic Conditions and Impacts

Thursday, November 07, 2024

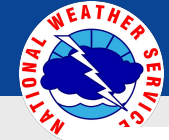
- **Above Normal:** Statewide, there are no areas of above normal average streamflow.
- **Normal:** The average streamflow for much of MT (especially the north central and northeastern portion of the state), is at a level that is considered, “normal.”
- **Below Normal:** Most of western and southwestern MT, with portions of the region east of The Continental Divide, are showing below normal streamflow. Some basins located across portions of western and north central MT, are listed as, “much below normal.” An isolated area of northwestern MT is include in the, “low” streamflow range.



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		

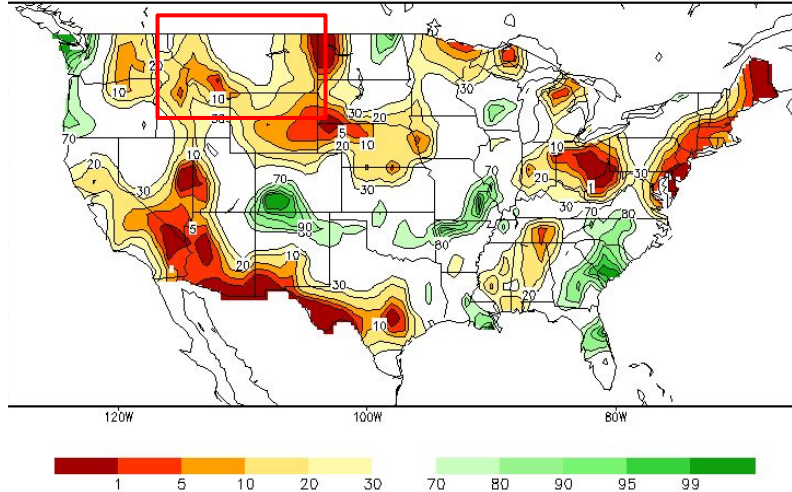
Image Caption: USGS 7-day Average Streamflow HUC Map, valid: November 7, 2024





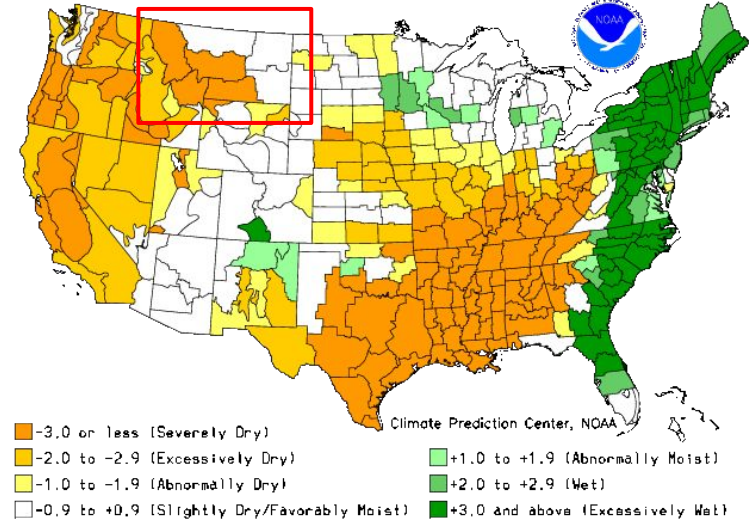
Agricultural Impacts

Calculated Soil Moisture Ranking Percentile
NOV 07, 2024



- The Soil Moisture Ranking Percentile resides in the lower range across western, southwestern and eastern MT. North central and central MT are included in the 30 to 70 percentile range.

Crop Moisture Index by Division
Weekly Value for Period Ending OCT 26, 2024
Short Term Need vs. Available Water in a Shallow Soil Profile



- The Crop Moisture Index includes western, central and much of southern MT in an area identified as, "severely dry," while soil moisture values for north central and eastern MT are considered, "slightly dry/favorably moist."

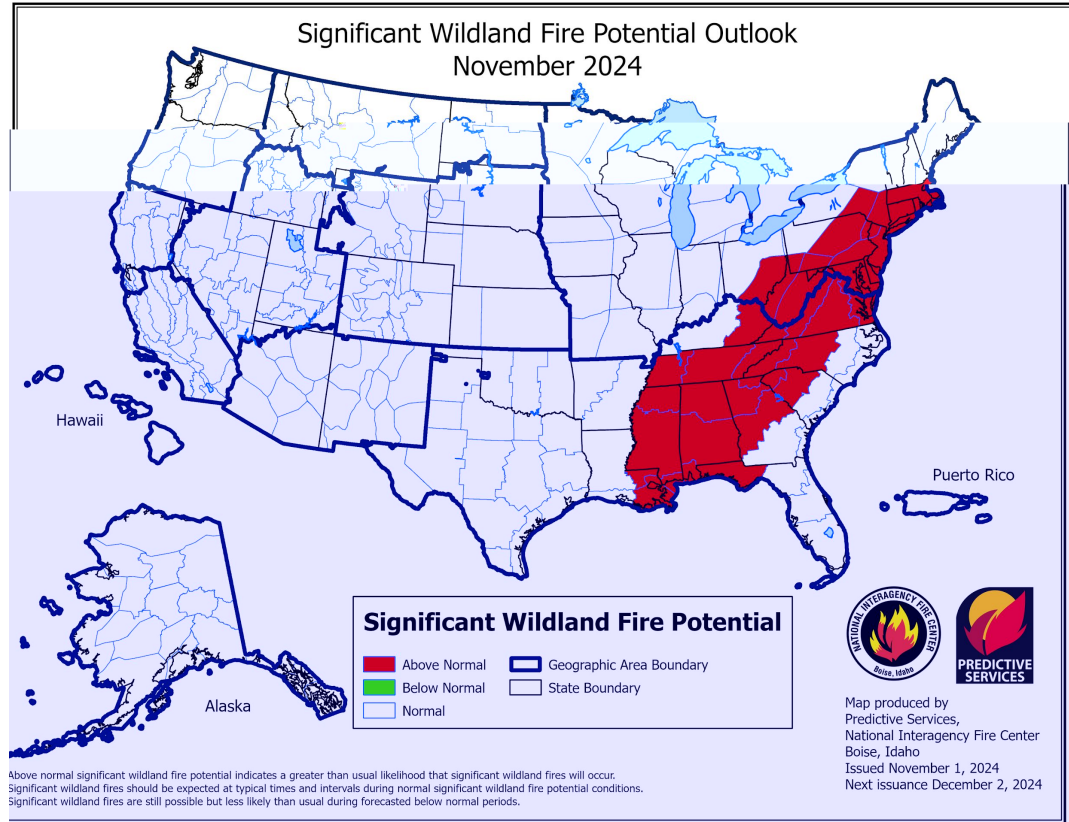




Fire Hazard Impacts

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

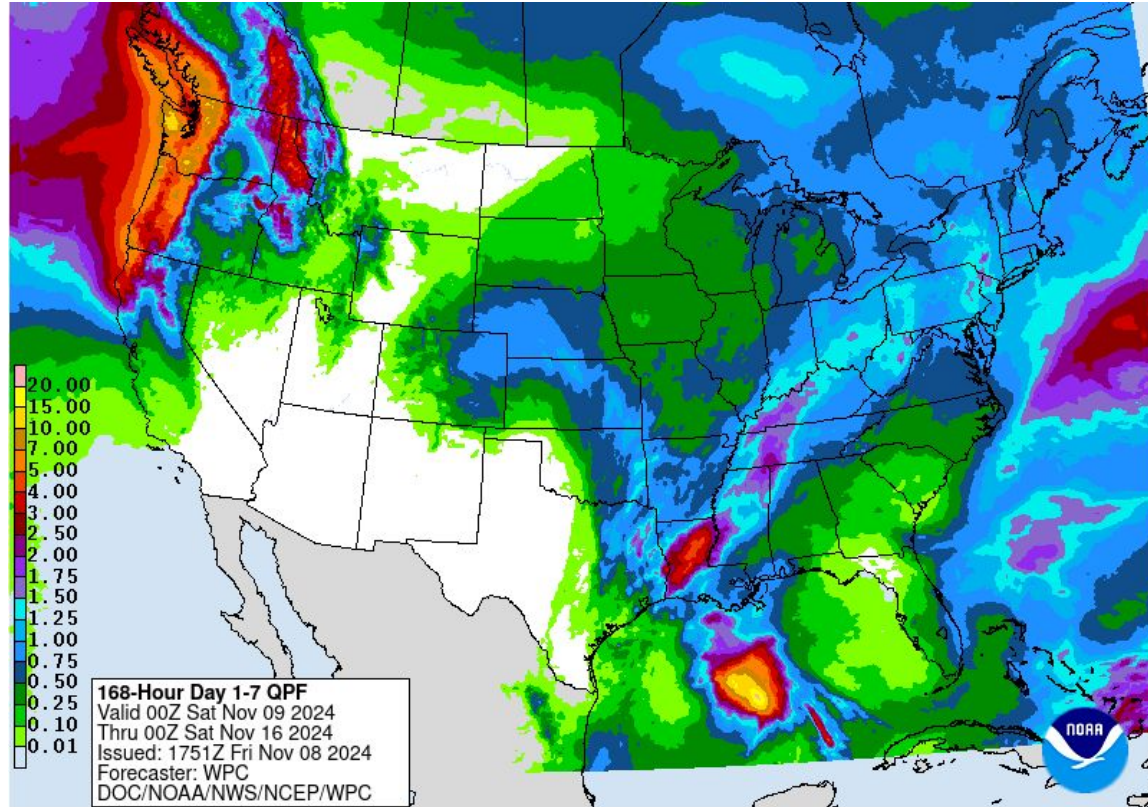
- For the month of November, the state of MT is included in an area of normal significant wildland fire potential conditions. Significant wildland fires should be expected at typical times and intervals.





Seven Day Precipitation Forecast

- During the week of, November 9 - 16, 2024, north central, central and eastern MT are forecast to receive little to no moisture.
- Portions of northwestern MT are forecast to receive as much as 1.75" to, isolated areas of, 5" of liquid precipitation, with the highest amounts of moisture forecast to occur in the higher elevations. The remainder of western MT, southwestern MT, and portions of south central MT are forecast to receive up to 1.50" of liquid precipitation, during this period.





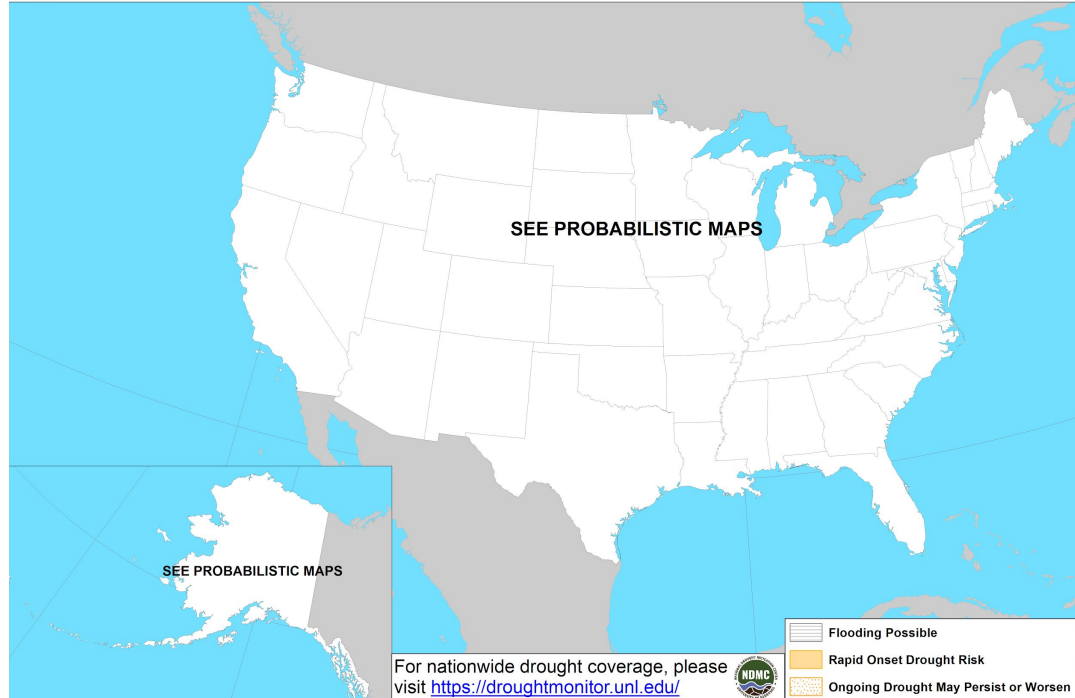
Rapid Onset Drought Outlook

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, November 16th to 22nd.



Day 8-14 U.S. Hazards Outlook
Valid: 11/16/2024-11/22/2024



Climate Prediction Center
Made: 11/08/2024 3PM EST

Follow us:
www.cpc.ncep.noaa.gov





Long Range Outlooks

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

- For the month of November, the Temperature Outlook shows equal chances for above or below normal temperatures, statewide.

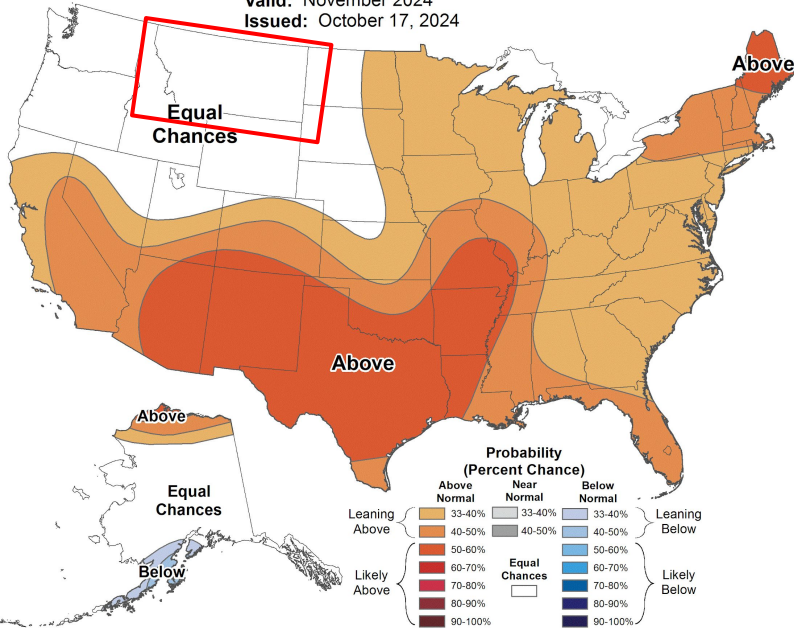
- The Precipitation Outlook shows better chances for above normal precipitation across the western half of the state, with equal chances for above or below normal precipitation across the eastern half.



Monthly Temperature Outlook



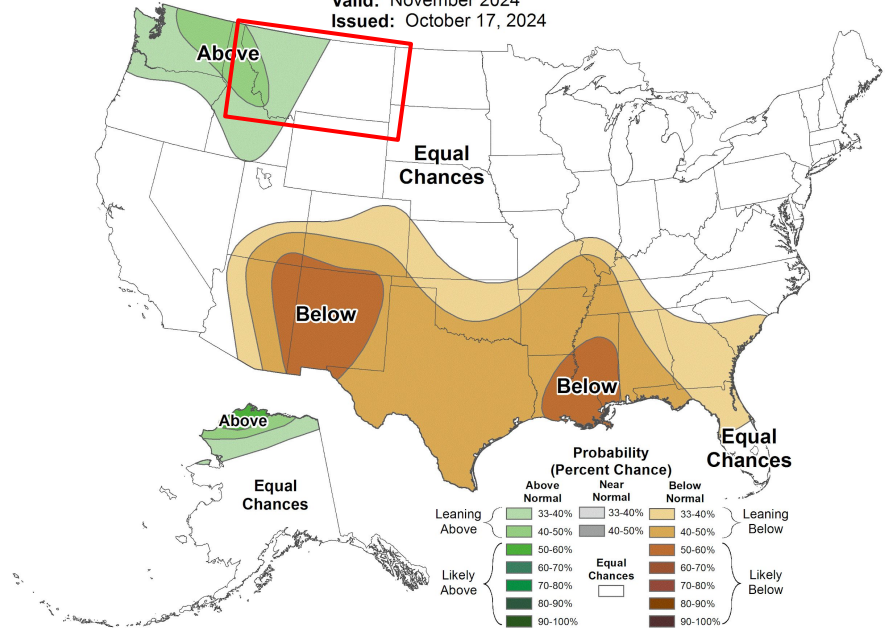
Valid: November 2024
Issued: October 17, 2024



Monthly Precipitation Outlook



Valid: November 2024
Issued: October 17, 2024





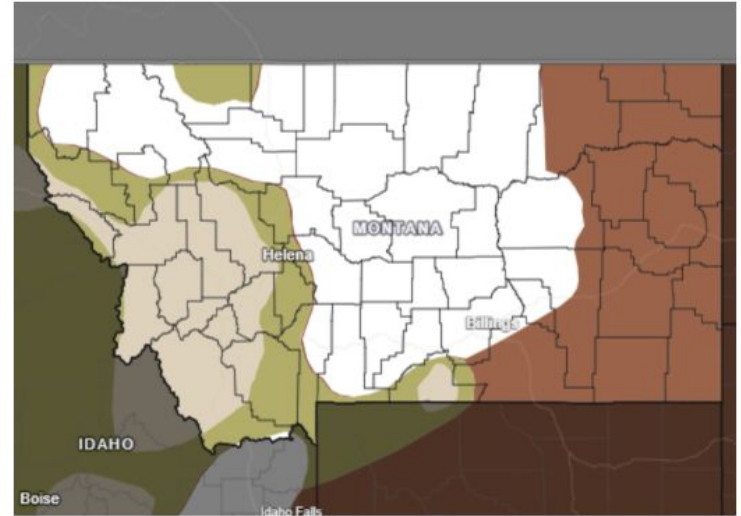
Drought Outlook

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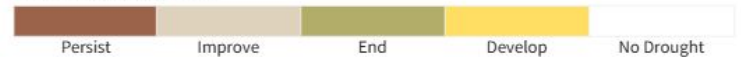
- **Persisting:** Drought conditions are predicted to persist across portions of southern and eastern MT.
- **Developing:** None
- **Improving:** Improving drought conditions cover portions of western, central and southern MT.
- **Ending:** Drought conditions are predicted to enter the ending process across portions of western, north central, central, and southern MT.
- **No Drought:** Portions of northwestern, north central, central, southern and eastern MT are included in an area of, “no drought,” during this 3-month outlook period.

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

Seasonal (3-Month) Drought Outlook for October 31, 2024–January 31, 2025



Drought Is Predicted To...



The Seasonal Drought Outlook predicts whether drought will develop, remain, improve, or be removed in the next 3 months or so.

Source(s): Climate Prediction Center

Last Updated: 10/31/24

Drought.gov



National Oceanic and Atmospheric Administration

U.S. Department of Commerce

National Weather Service
Great Falls, Montana



Summary of Impacts

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

Hydrologic Impacts

- About 26% of the state of Montana is reported, “moderately dry,” with an additional, 58% reported, “severely dry.” Montana State Library | National Drought Mitigation Center. 2024. Drought Impacts. [accessed September 27, 2024]. <https://storymaps.arcgis.com/stories/76204aa1271a4a7f8a775fc2bba9ef83>

Agricultural Impacts

- Strong Impacts to crops and grasslands

Fire Hazard Impacts

- As fire season approaches an end, drought and dead fuels remain ongoing concerns.

Other Impacts

- Heightened focus continues over burn scar areas.
- Some reservoirs and rivers are running below normal.

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.

