



Drought Information Statement for MONTANA

Valid: July 26, 2024

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

Contact Information:

- This product will be updated, August 31, 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 impact a portion of western Montana.





U.S. Drought Monitor

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

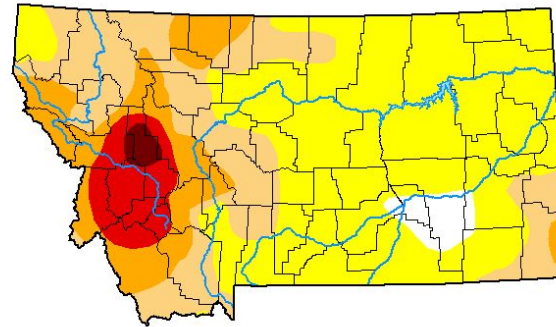
U.S. Drought Monitor Montana

July 23, 2024

(Released Thursday, Jul. 25, 2024)

Valid 8 a.m. EDT

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



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	2.75	97.25	43.28	19.59	6.69	0.90
Last Week 07-16-2024	2.75	97.25	41.24	17.59	2.71	0.00
3 Months Ago 04-23-2024	14.10	85.90	39.72	12.69	1.47	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 07-25-2023	59.63	40.37	18.83	8.03	0.00	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>

Author:

Rocky Bilotta
NCEI/NOAA



droughtmonitor.unl.edu



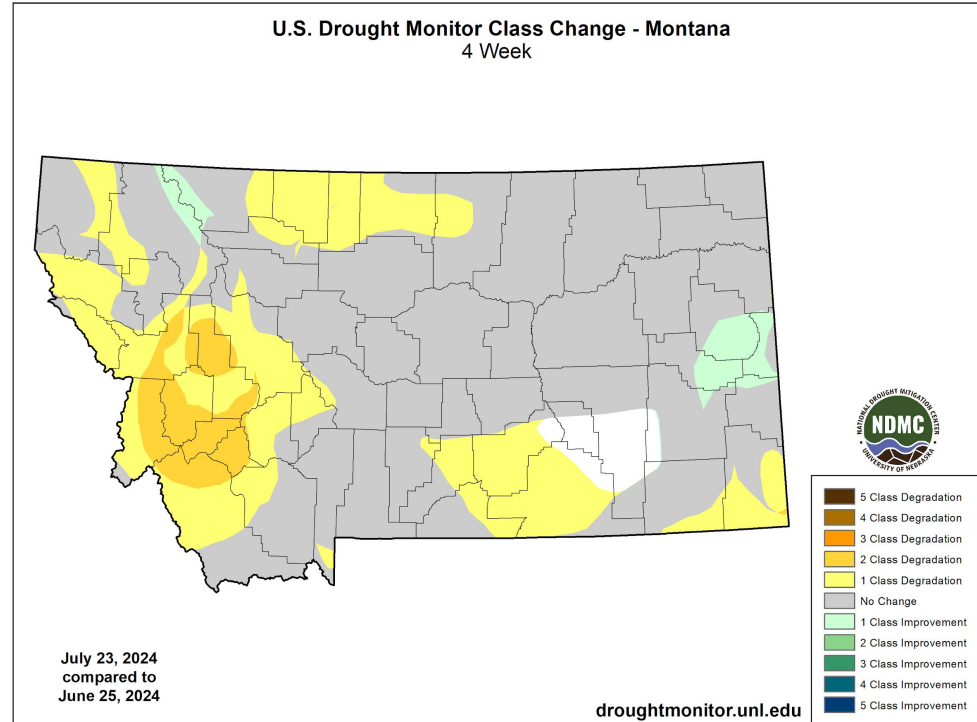


Recent Change in Drought Intensity

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

- Four Week Drought Monitor Class Change

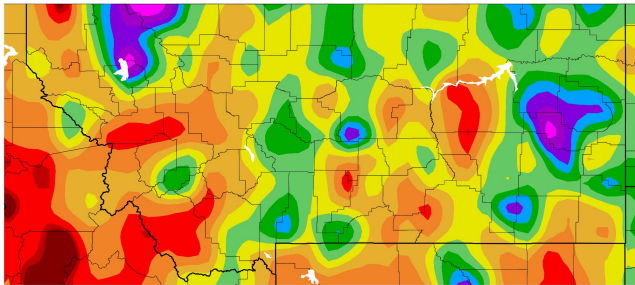
- Drought Worsened:** Across portions of western, north central, central, southwestern and southeastern MT, during the past four weeks.
- No Change:** No change in drought conditions, over the past month, were observed over most of central and eastern, MT.
- Drought Improved:** Isolated areas of improvement occurred over northwestern and far east central, MT.





Precipitation

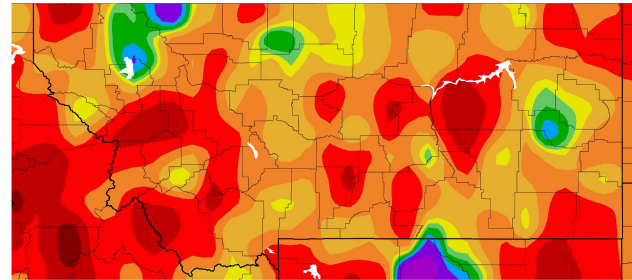
Precipitation (in)
6/25/2024 – 7/24/2024



Generated 7/25/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

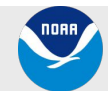
Percent of Normal Precipitation (%)
6/25/2024 – 7/24/2024



Generated 7/25/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

- **Precipitation (in):** During the past month, most of the state received 0.5” to 1.5” of precipitation, with some isolated areas receiving more than 2.0” of moisture. Some areas of the state received less than 0.5” of precipitation.
- **Percent of Normal Precipitation (%):** Most of the state received below normal precipitation, while a few isolated areas received above normal precipitation amounts.

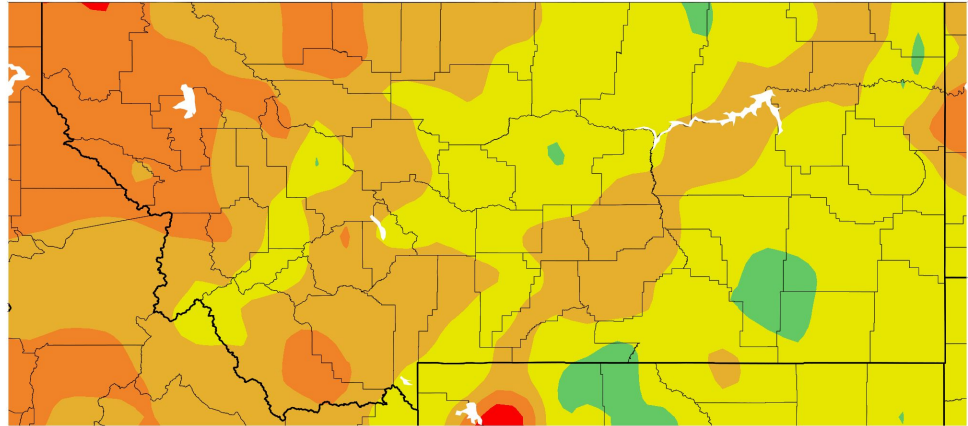




Temperature

Departure from Normal Temperature (F) 6/25/2024 – 7/24/2024

- Most of The Treasure State experienced warmer than normal temperatures, with significant portions of western MT, and isolated areas of north central, central, southwestern and far east central MT showing as high as 6F warm departure from normal.
- There are a few isolated areas where temperatures were slightly cooler than normal.



Generated 7/25/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

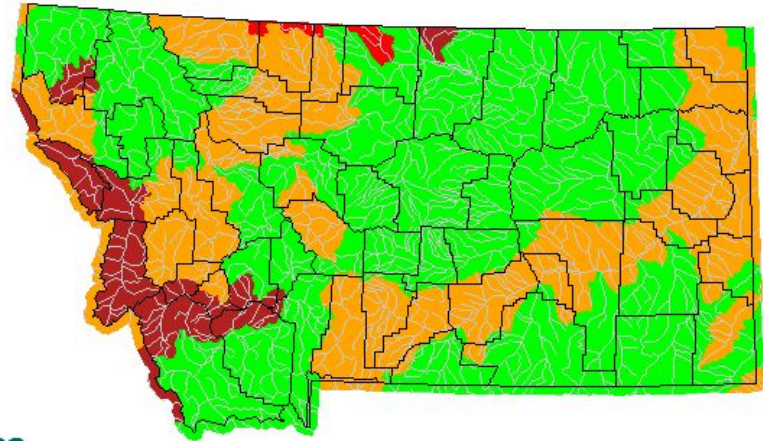




Hydrologic Conditions and Impacts

Wednesday, July 24, 2024

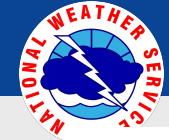
- **Above Normal:** None
- **Normal:** The average streamflow for much of MT, is at a level that is considered, “normal.”
- **Below Normal:** Nearly half of the state is experiencing, “below normal,” stream flow, with areas of western, southwestern and north central MT in the, “much below normal,” range. Isolated areas of The Milk River Basin continue within the, “low,” average streamflow percentile class.



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		

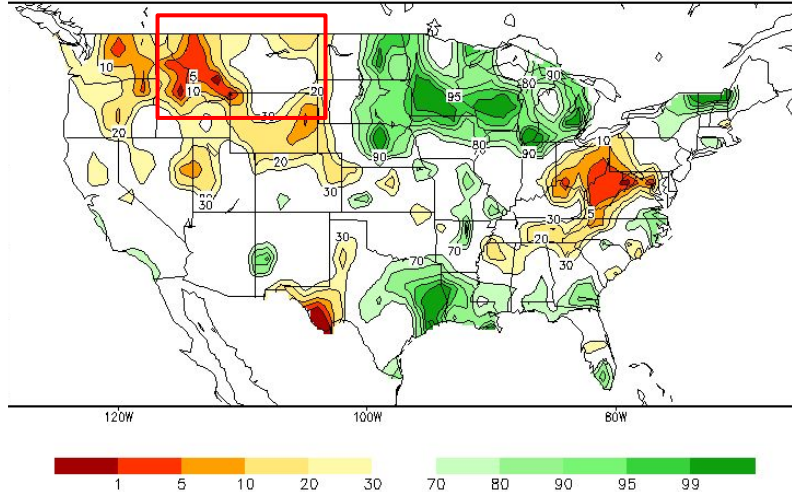
Image Caption: USGS 7-day Average Streamflow HUC Map, valid: July 24, 2024





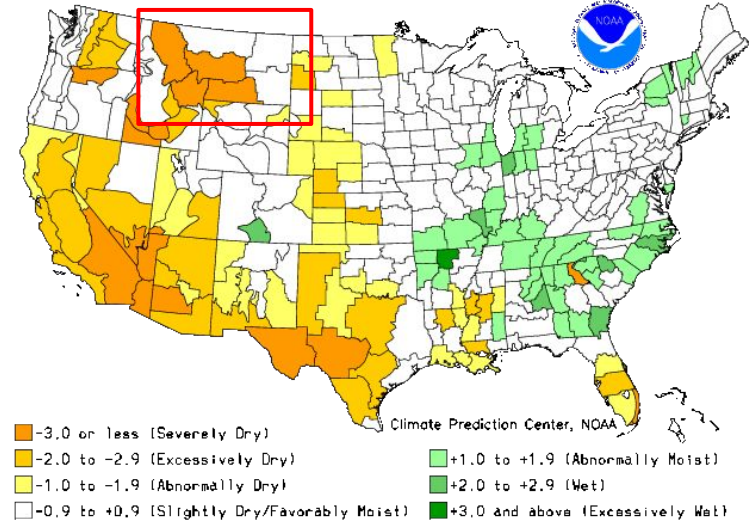
Agricultural Impacts

Calculated Soil Moisture Ranking Percentile
JUL 24, 2024



- The Soil Moisture Ranking Percentile resides in the low range across much of the state, while the remainder of the state ranks in the 30 to 70 percentile range.

Crop Moisture Index by Division
Weekly Value for Period Ending JUL 20, 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.”

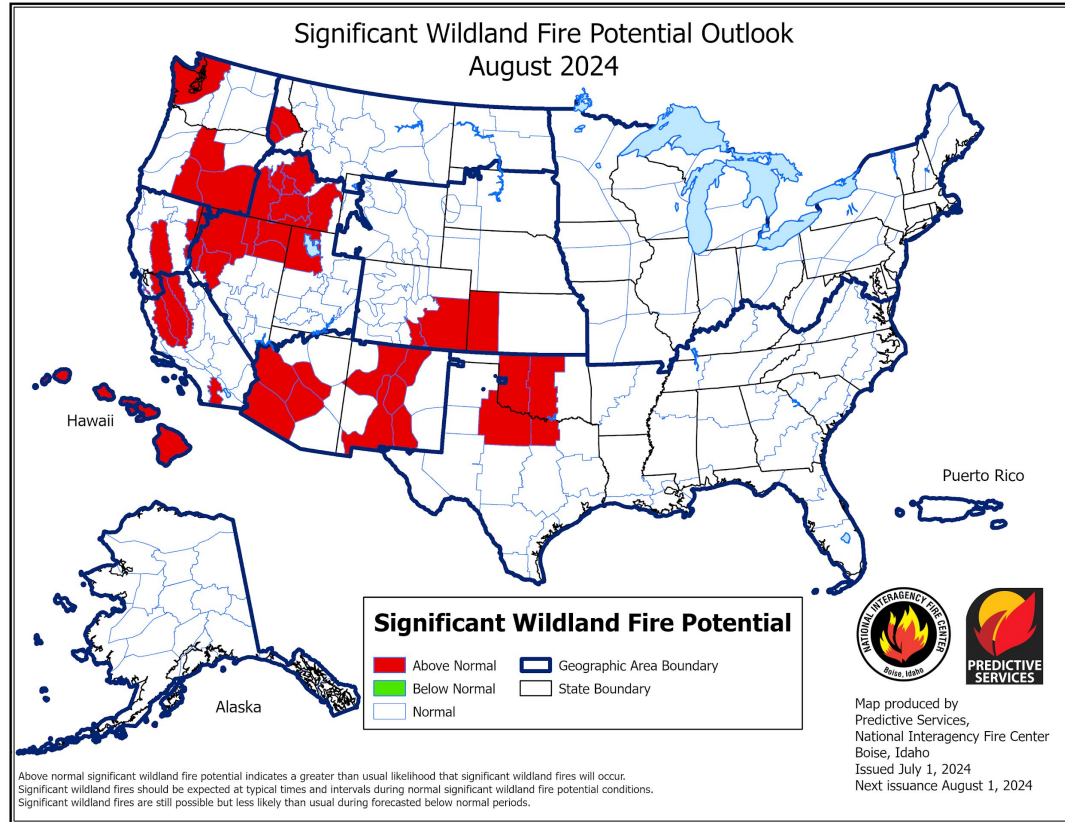




Fire Hazard Impacts

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

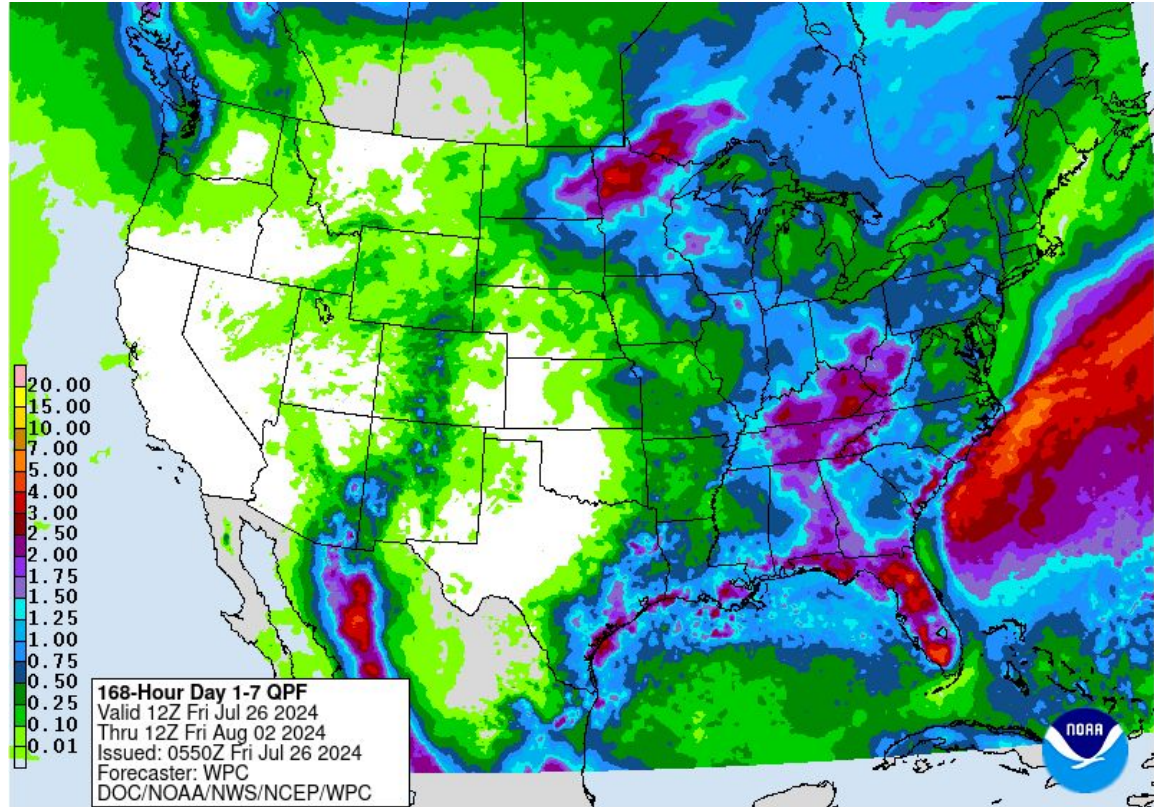
- Montana is included in an area of normal significant wildland fire potential conditions. Significant wildland fires should be expected at typical times and intervals.
- **Grasslands:** Fuels are, generally, trending drier.





Seven Day Precipitation Forecast

- During the week of, July 26 to August 2, 2024, much of north central, central and southwest MT is forecast to remain dry.
- The remainder of the state is, generally, forecast to receive up to 0.1” of liquid precipitation. A few isolated areas may receive up to 0.5”, during this period.





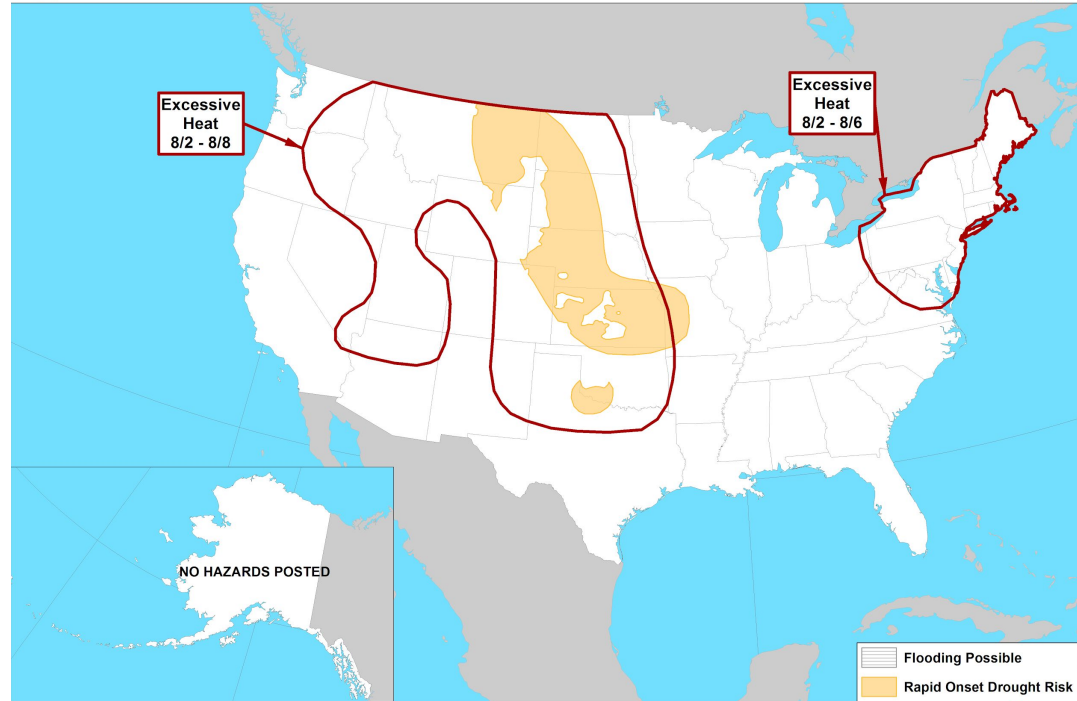
Rapid Onset Drought Outlook

Links to the latest Climate Prediction Center 8 to 14 day [Temperature Outlook](#) and [Precipitation Outlook](#).

- For the outlook period of, August 2 - 8, 2024, most of eastern MT is included in an area of Rapid Onset Drought Risk.
- Additionally, the entire state is included as part of a large area of Excessive Heat.



Day 8-14 U.S. Hazards Outlook
Valid: 08/02/2024-08/08/2024



Climate Prediction Center
Made: 07/25/2024 3PM EDT

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





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 The Treasure State to experience warmer than normal temperatures.

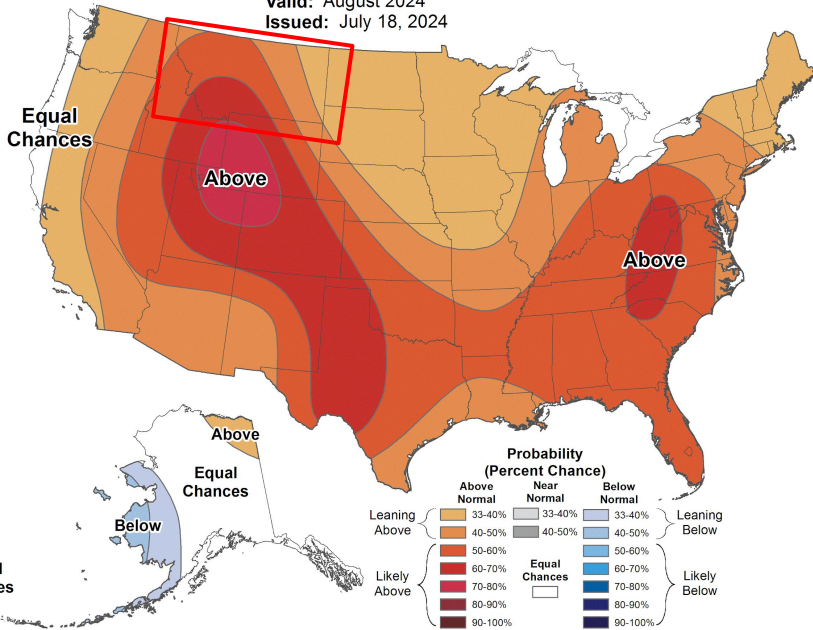
- Virtually statewide, the Precipitation Outlook shows a better chance for below normal precipitation.



Monthly Temperature Outlook



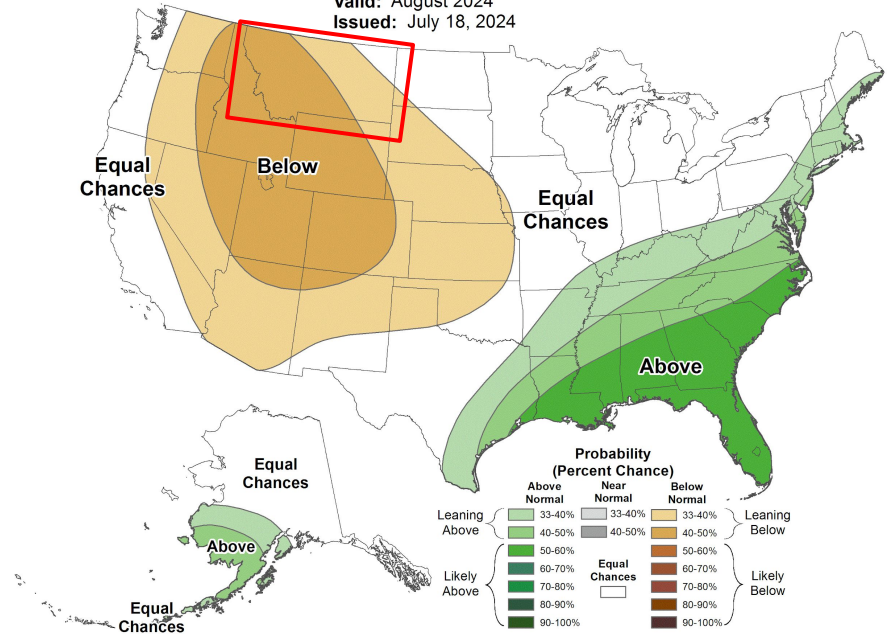
Valid: August 2024
Issued: July 18, 2024



Monthly Precipitation Outlook



Valid: August 2024
Issued: July 18, 2024





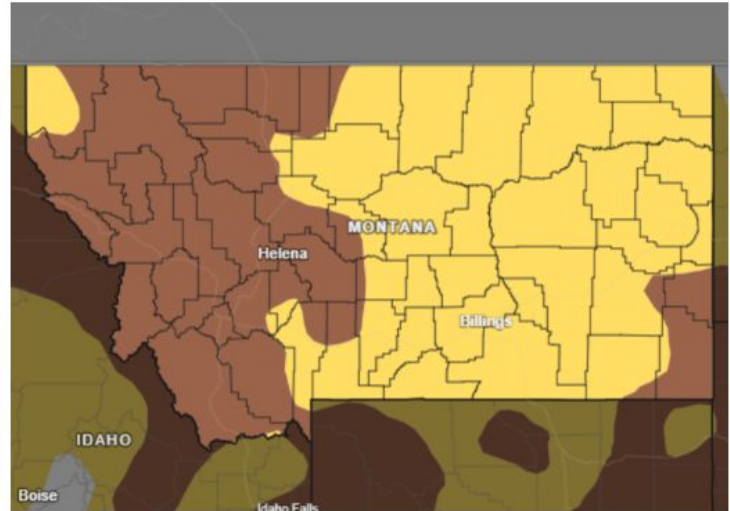
Drought Outlook

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

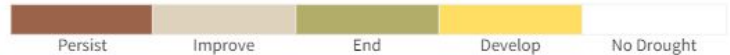
- **Persisting:** Drought conditions are predicted to persist across, virtually, the entire western third of the state, as well as, a portion of far southeastern MT.
- **Developing:** The remainder of the state
- **Improving:** None
- **Ending:** None

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

Seasonal (3-Month) Drought Outlook for July 18-October 31, 2024



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: 07/18/24

Drought.gov

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 47% of the state of Montana is reported, “moderately dry,” with an additional, greater than 17% reported, “severely dry.” Montana State Library | National Drought Mitigation Center. 2024. Drought Impacts. [accessed July 26, 2024]. <https://storymaps.arcgis.com/stories/76204aa1271a4a7f8a775fc2bba9ef83>

Agricultural Impacts

- Impacts to crops and grasslands

Fire Hazard Impacts

- An extended period of anomalously hot temperatures with dry conditions, supports the curing of fuels.

Other Impacts

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

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.

