



# Drought Information Statement for MONTANA

Valid: June 13, 2024

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

Contact Information:

- This is the last update until drought conditions change significantly in Montana.
  - Please see all currently available products at <https://drought.gov/drought-information-statements>.
  - Please visit <https://www.weather.gov/TFX/DroughtInformationStatement> for previous statements.
- 
- D3 Drought conditions are no longer observed in Montana.





# U.S. Drought Monitor

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

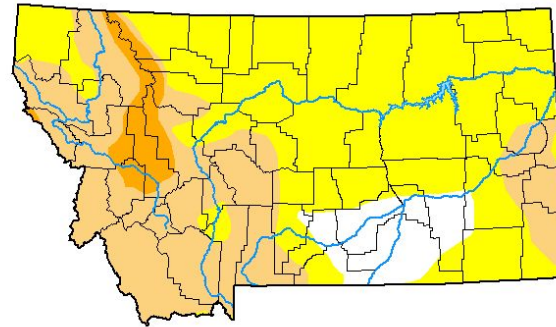
## U.S. Drought Monitor Montana

June 11, 2024

(Released Thursday, Jun. 13, 2024)

Valid 8 a.m. EDT

- Drought intensity and Extent
  - **D4 (Exceptional Drought)**: None occurring
  - **D3 (Extreme Drought)**: None occurring.
  - **D2 (Severe Drought)**: Mostly along the divide and east of Missoula.
  - **D1 (Moderate Drought)**: Much of Western MT, and portions of fare Eastern MT.
  - **D0: (Abnormally Dry)**: Much of MT, expect the Billings area.



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	8.07	91.93	37.37	4.63	0.00	0.00
Last Week 06-04-2024	43.83	56.17	37.37	4.63	0.00	0.00
3 Months Ago 03-12-2024	5.42	94.58	42.83	19.66	2.36	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 06-13-2023	68.39	31.61	17.40	3.52	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:

Richard Tinker  
CPC/NOAA/NWS/NCEP



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)



National Oceanic and  
Atmospheric Administration

U.S. Department of Commerce

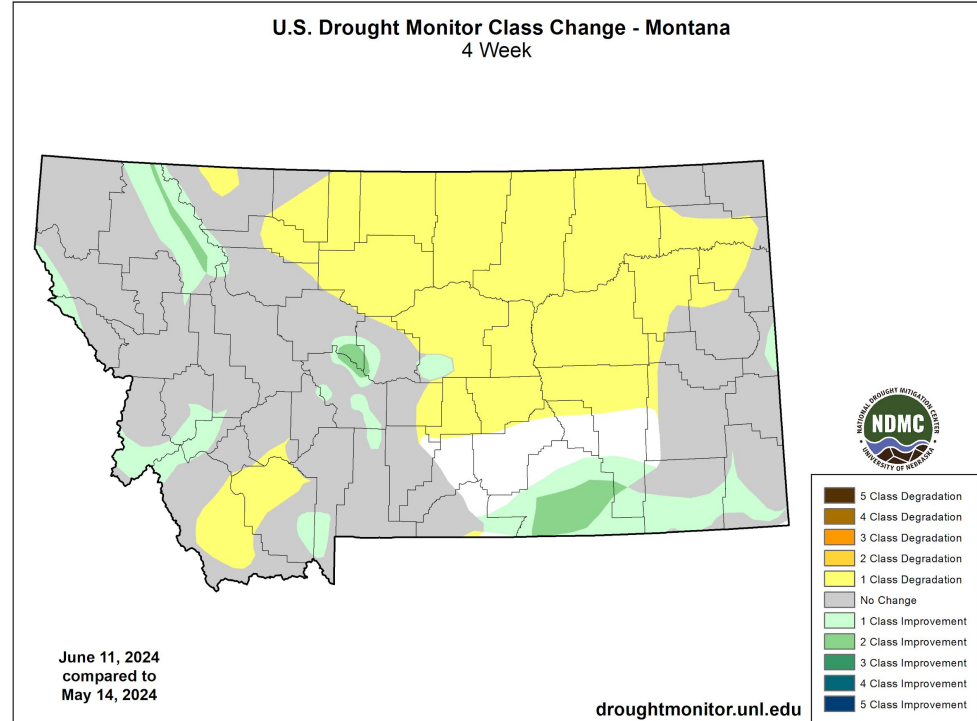
National Weather Service  
Great Falls, Montana



# Recent Change in Drought Intensity

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

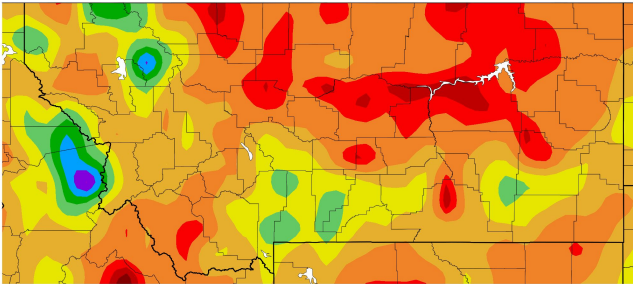
- Four Week Drought Monitor Class Change
  - **Drought Worsened:** Drought conditions worsened slightly for many areas over the eastern half of the state.
  - **No Change:** No change in drought conditions, over the past month, were observed over most of western and far eastern MT.
  - **Drought Improved:** Minor improvements were observed south of Billings.





# Precipitation

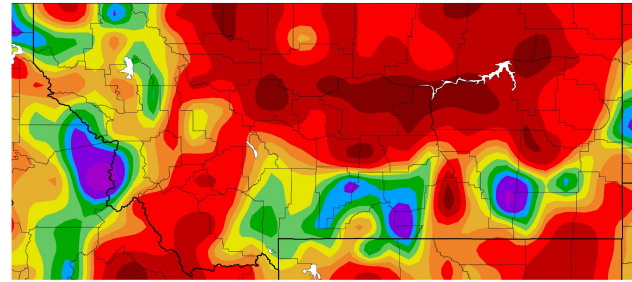
Precipitation (in)  
5/14/2024 – 6/12/2024



Generated 6/13/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

Percent of Normal Precipitation (%)  
5/14/2024 – 6/12/2024



Generated 6/13/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

- **Precipitation (in):** During the past month, most of the state received 1.0” to 3.5” of precipitation, with some isolated areas receiving more than 3.0” of moisture. A few isolated areas of the state received less than 1.0” of precipitation.
- **Percent of Normal Precipitation (%):** Generally, the northern half of MT had below average precipitation, while portions of Western and Southern MT had above normal precipitation.

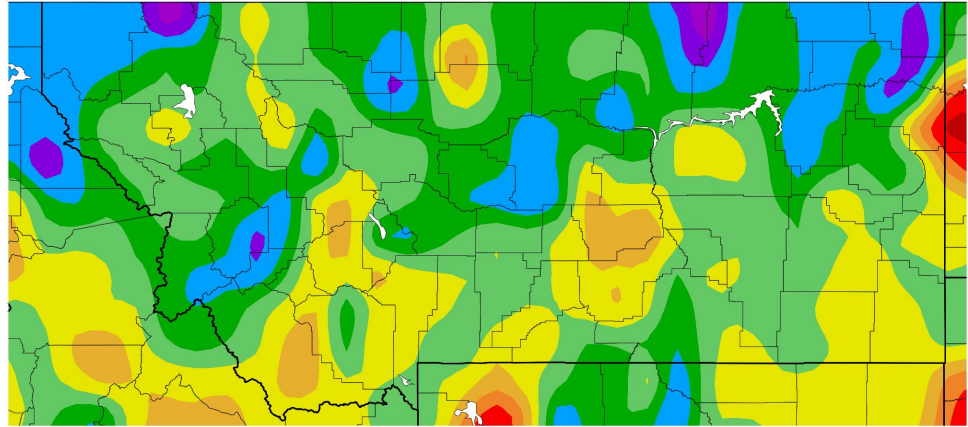




# Temperature

Departure from Normal Temperature (F)  
5/14/2024 – 6/12/2024

- Much of MT had below normal temperatures over the past month, small areas of above normal temperatures.



Generated 6/13/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

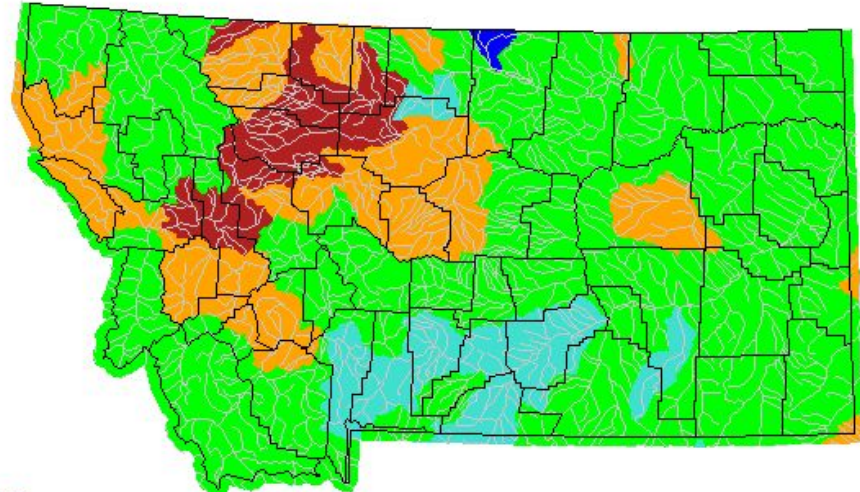




# Hydrologic Conditions and Impacts

Wednesday, June 12, 2024

- **Above Normal:** Above normal stream flows are generally along Lodge Creek.
- **Normal:** The average streamflow for most of Eastern, far Southwest and far Northwest MT.
- **Below Normal:** Most areas of below normal streamflow are located across North Central MT and areas east of Missoula.



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			

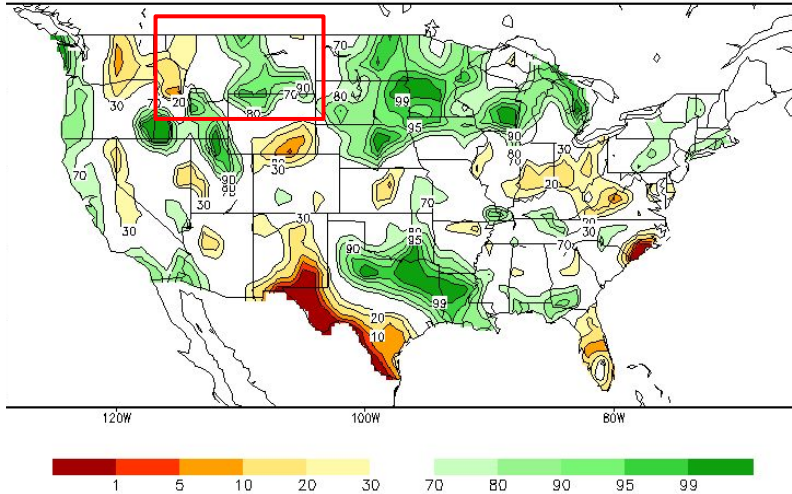
Image Caption: USGS 7-day average streamflow HUC map valid: May 22, 2024





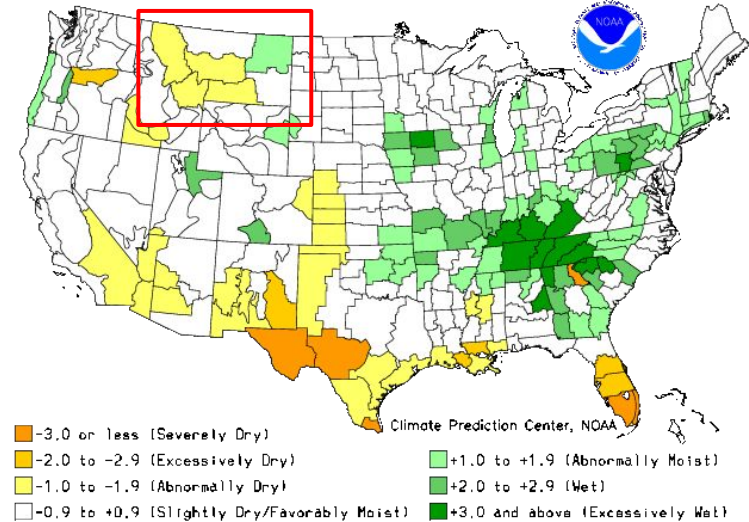
# Agricultural Impacts

Calculated Soil Moisture Ranking Percentile  
JUN 12, 2024



- The Soil Moisture Ranking Percentile resides in the low range across western MT, while the eastern half of the state, generally, ranks 70% or higher.

Crop Moisture Index by Division  
Weekly Value for Period Ending JUN 8, 2024  
Short Term Need vs. Available Water in a Shallow Soil Profile



- The Crop Moisture Index includes Western and Central MT in an area identified as, “abnormally dry,” while soil moisture values for the rest of the state continue, “slightly dry/favorably moist.”

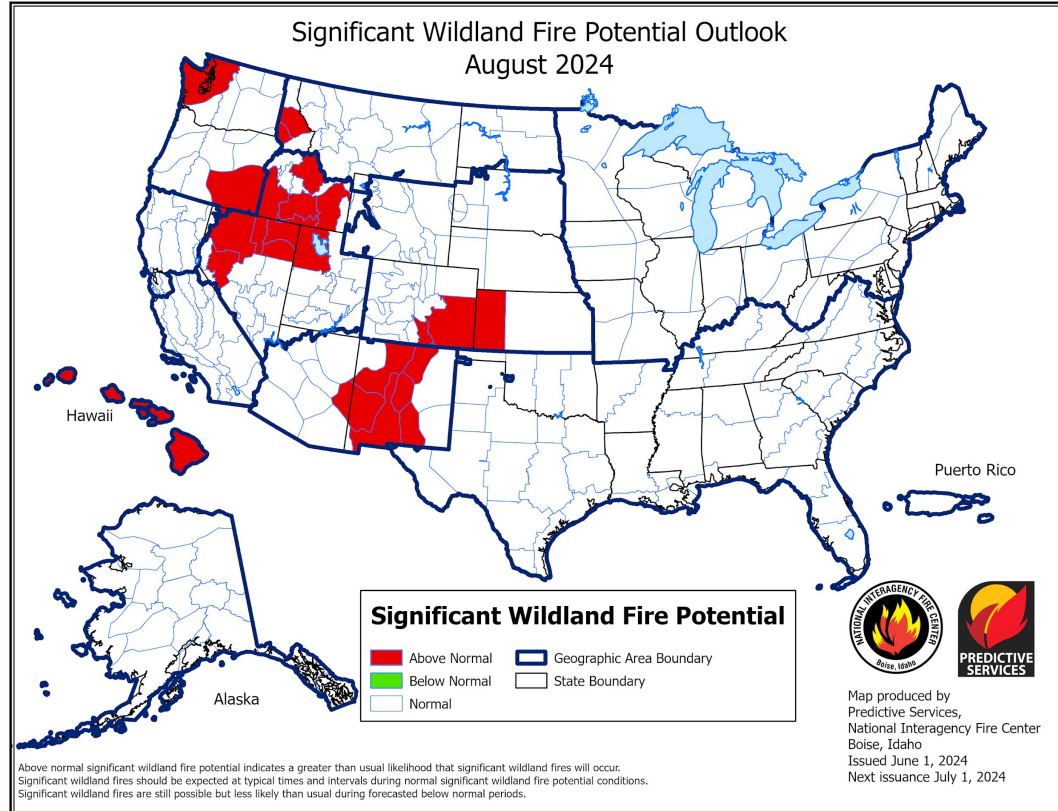




# Fire Hazard Impacts

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

- **Grasslands:** Fire impacts continue possible a few weeks after fuels dry out.
- **Mountains:** Fire season begins after the snow melts out.

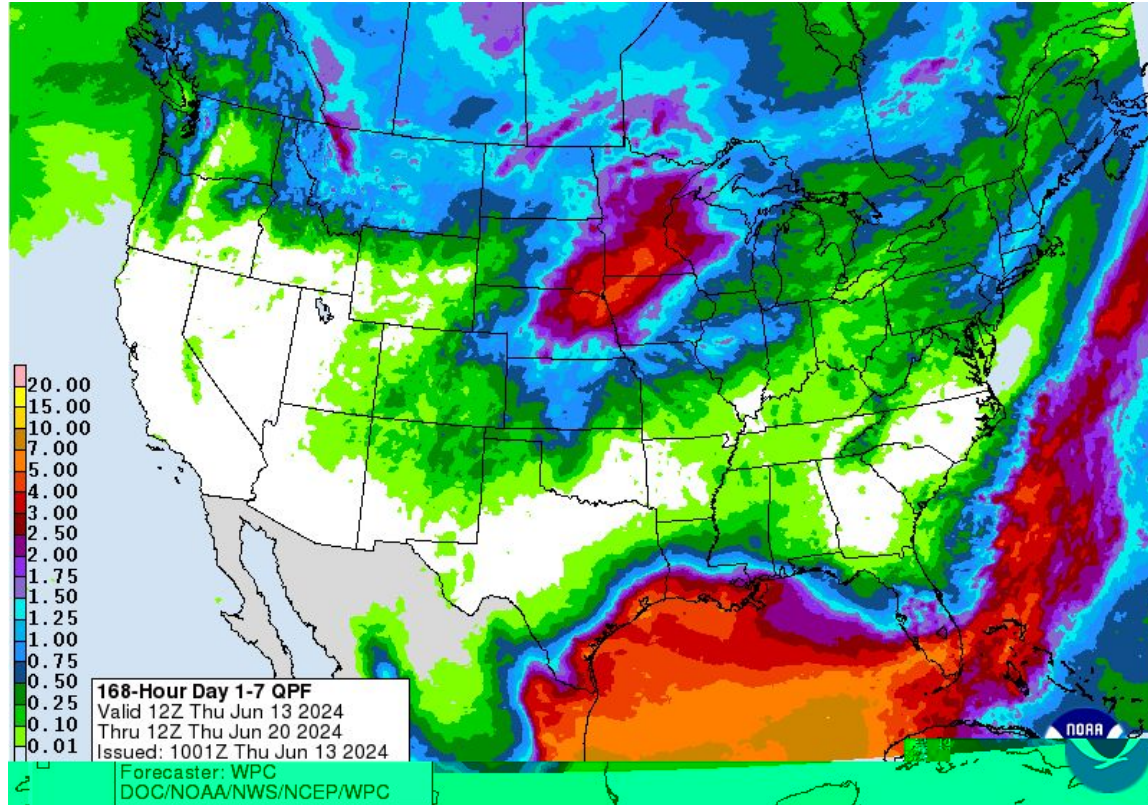






# Seven Day Precipitation Forecast

- During the week of, June 13 thru June 20, a rather wet period is forecast over much of MT.
- Widespread rainfall of 0.50 to 2 inches is possible across much of MT.
- Snow is expected to fall in the mountains, especially for elevations above 6000 feet.





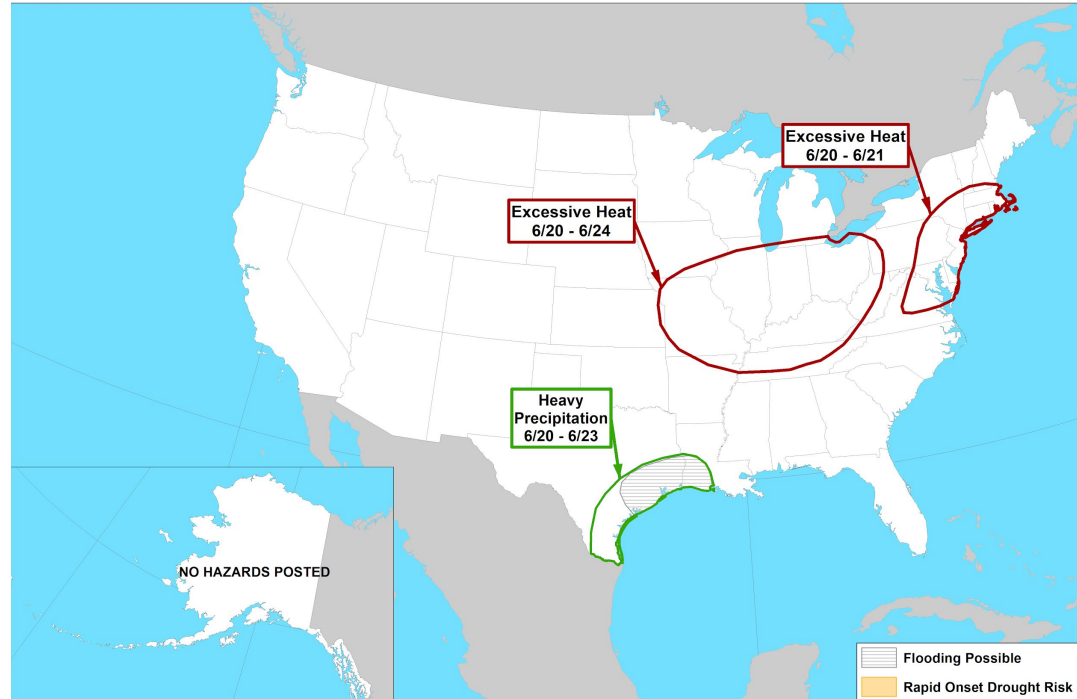
# Rapid Onset Drought Outlook

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, June 20th through June 26th.



Day 8-14 U.S. Hazards Outlook  
Valid: 06/20/2024-06/26/2024



Climate Prediction Center  
Made: 06/12/2024 3PM EDT

Follow us:   
[www.cpc.ncep.noaa.gov](http://www.cpc.ncep.noaa.gov)





# Long Range Outlooks

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

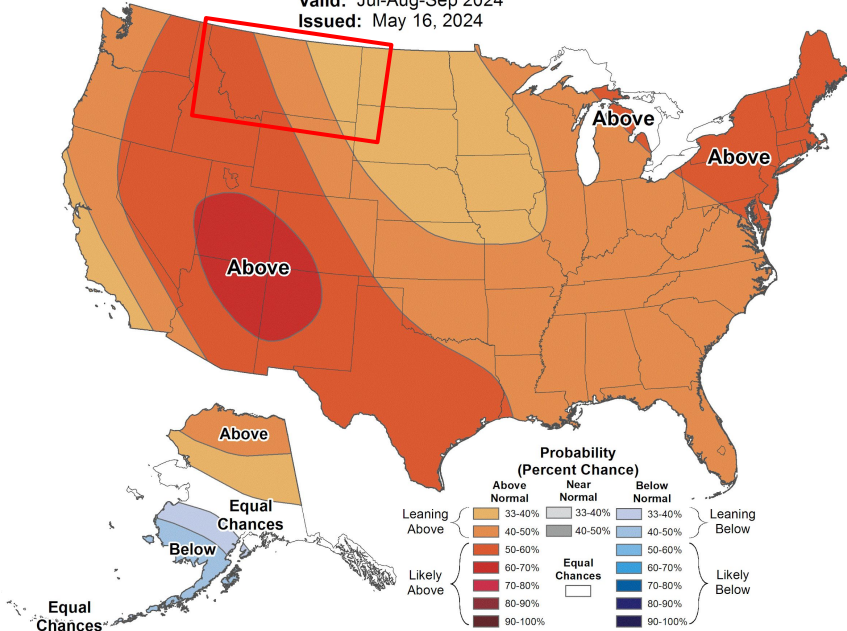
- Looking ahead through the rest of summer above normal temperatures are favored for the entire state of MT.
- Looking ahead through the rest of summer below normal precipitation is favored for the entire state of MT.



## Seasonal Temperature Outlook



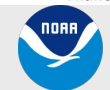
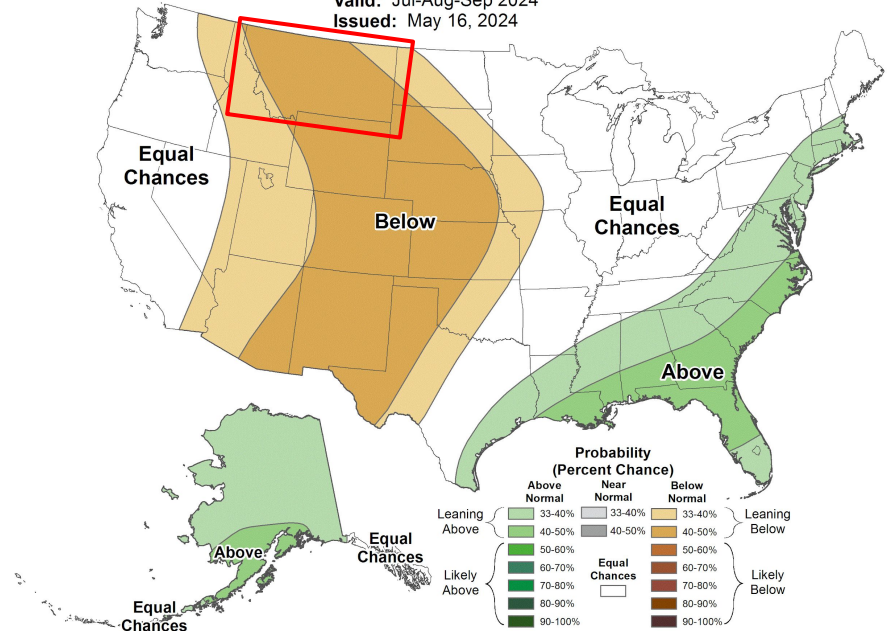
Valid: Jul-Aug-Sep 2024  
Issued: May 16, 2024



## Seasonal Precipitation Outlook



Valid: Jul-Aug-Sep 2024  
Issued: May 16, 2024





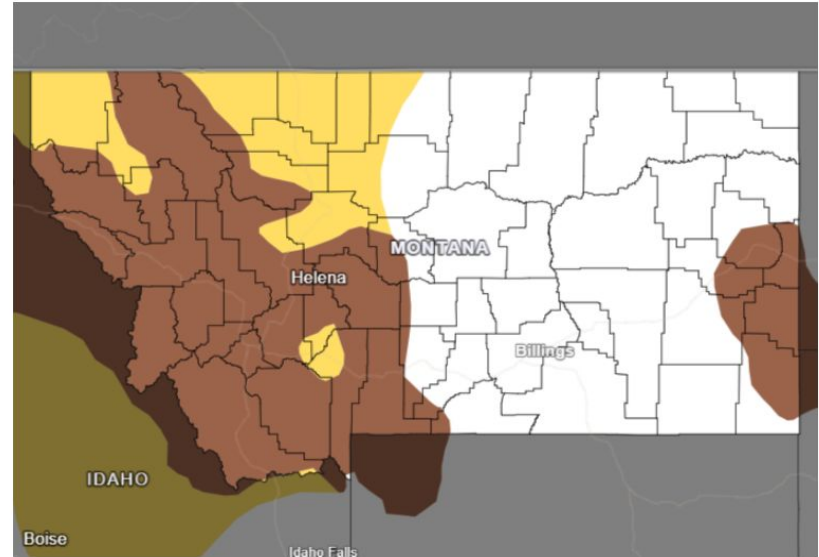
# Drought Outlook

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

- **Persisting:** Drought conditions are predicted to persist across much of western MT, as well as, portions of central, southern and eastern MT.
- **Developing:** Portions of North Central and Eastern MT

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

## Seasonal (3-Month) Drought Outlook for May 31–August 31, 2024



### Drought Is Predicted To...



Source(s): Climate Prediction Center  
Last Updated: 05/31/24

**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

- Some fairly nice improvements in the mountain snowpack has occurred in May.

## Agricultural Impacts

- Possible impacts to crops and grasslands

## Fire Hazard Impacts

- Moisture replacement from now through the end of June, along with the temperature trend during the last two weeks of June and the first week of July, will aid in assessing the summer season's fire impacts.

## Other Impacts

- Impacts to outdoor recreation, especially river activities, are possible this summer.

## Mitigation Actions

- Low snowpack does not equate to an absence of flooding. Flooding is possible at any time until the snow melts out of the mountains.
- Additionally, a late spring storm could result in some areal flooding.

