Drought Information Statement for MONTANA

Valid: MAY 24, 2024

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

Contact Information:

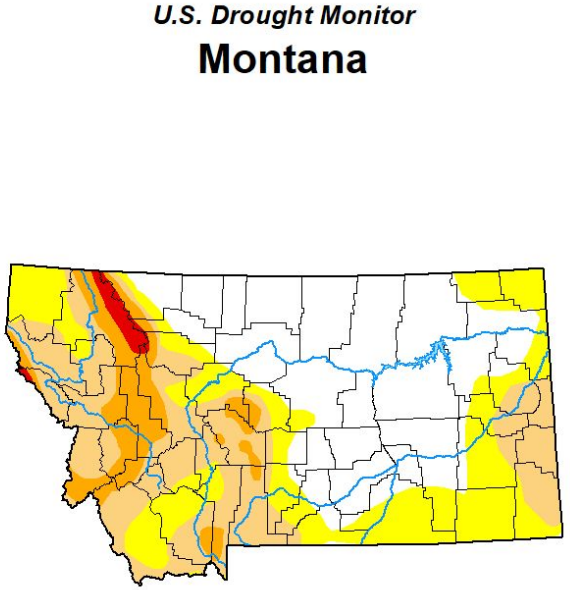
- This product will be updated by June 30, 2024 or sooner if drought conditions change significantly.
- Please see all currently available products at https://drought.gov/drought-information-statements.
- Please visit https://www.weather.gov/TFX/DroughtInformationStatement for previous statements.

- D3 Drought conditions continue west of the divide.

U.S. Drought Monitor

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

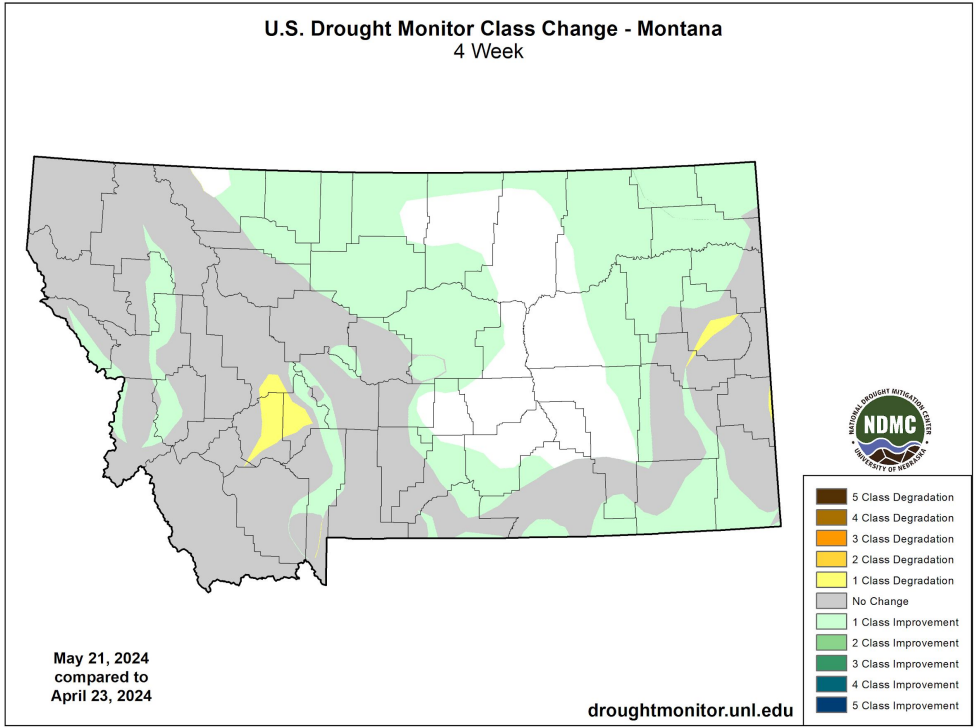
- Drought intensity and Extent
  - **D4 (Exceptional Drought)**: None occurring
  - **D3 (Extreme Drought)**: West of the divide over the Northern Rockies and around Borax and Saltese in far Western MT.
  - **D2 (Severe Drought)**: A portion of western MT, with a few areas across portions of central and southwestern MT
  - **D1 (Moderate Drought)**: Much of western and southwestern MT and portions of central and eastern MT
  - **D0: (Abnormally Dry)**: Much of western and southwestern MT and portions of central, southern and eastern MT



Recent Change in Drought Intensity

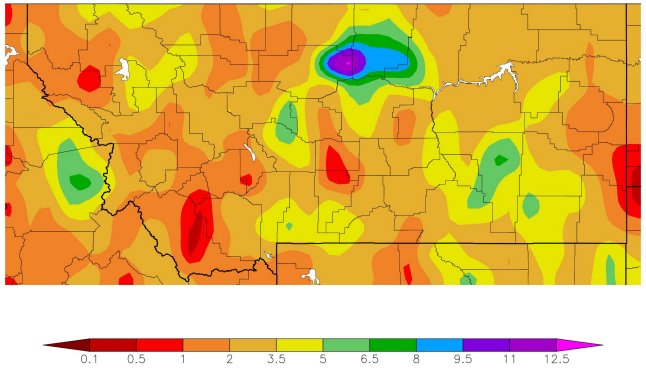
Link to the latest 4-week change map for Montana

- Four Week Drought Monitor Class Change
  - **Drought Worsened:** Drought conditions worsened slightly for areas around Helena and the Elkhorn Mountains.
  - **No Change:** No change in drought conditions, over the past month, were observed over most of western and southwestern MT, and portions of central, south central and eastern MT.
  - **Drought Improved:** Areas of improvement occurred over scattered areas of western, southwestern, south central and southeastern MT, as well as, significant portions of north central, central and northeastern MT.

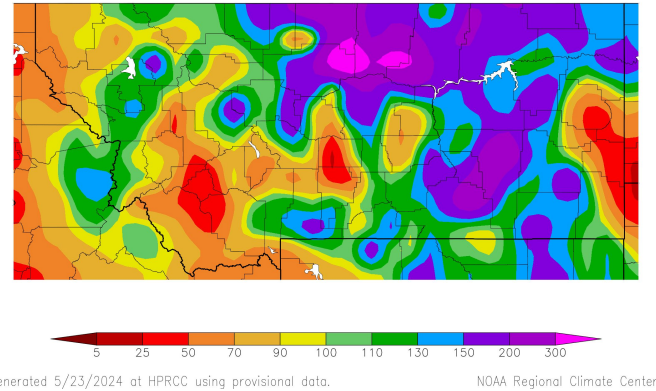


Precipitation

Precipitation (in)
4/23/2024 – 5/22/2024



Percent of Normal Precipitation (%)
4/23/2024 – 5/22/2024

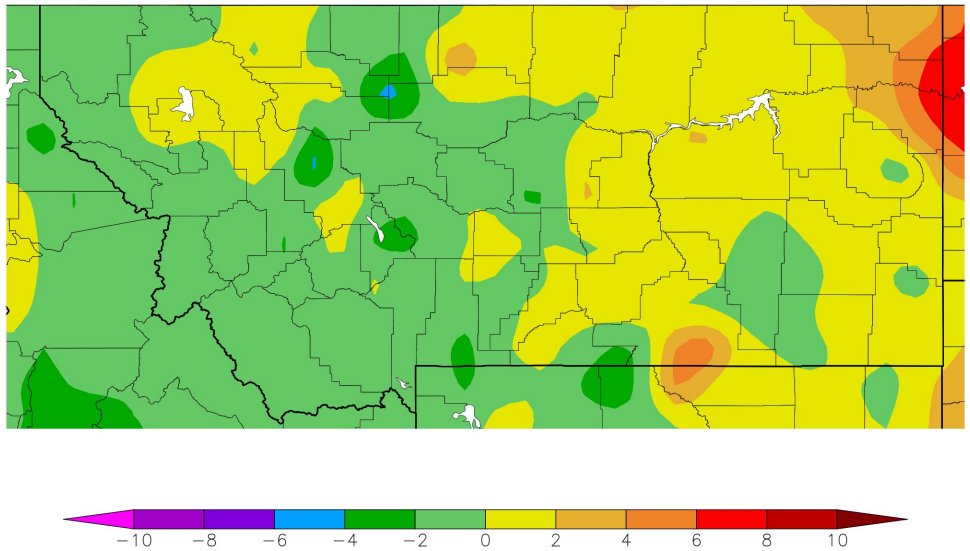


- **Precipitation (in):** During the past month, most of the state received 1.0” to 3.5” of precipitation, with some isolated areas receiving more than 5.0” of moisture. A few isolated areas of the state received less than 1.0” of precipitation.
- **Percent of Normal Precipitation (%):** Generally, the western third of the state received below normal precipitation, while the eastern two thirds of the state received above normal precipitation amounts.

Temperature

- The western half of MT generally experienced cooler than normal temperatures, while the eastern portions of the state experienced mostly warmer than normal temperatures.

Departure from Normal Temperature (F)
4/23/2024 – 5/22/2024



Generated 5/23/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

Hydrologic Conditions and Impacts

- **Above Normal:** Above normal stream flows are generally along the Milk River and a few rivers southeast of Billings.
- **Normal:** The average streamflow for most of MT, is at a level that is considered normal.
- **Below Normal:** Most areas of below normal streamflow are located across western MT.

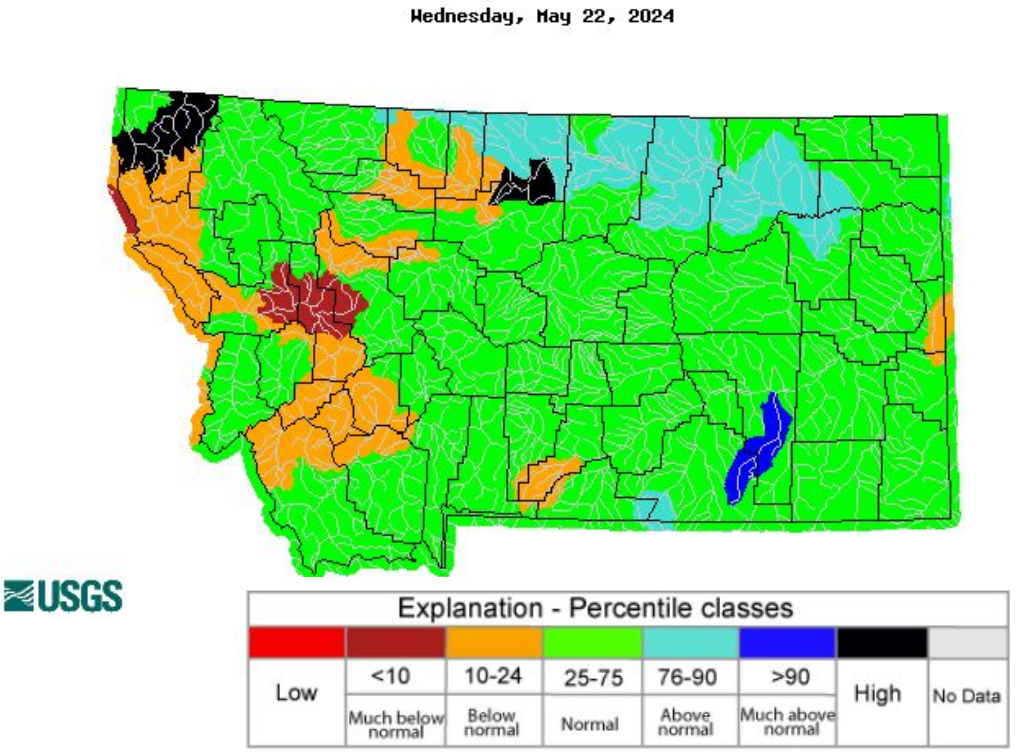
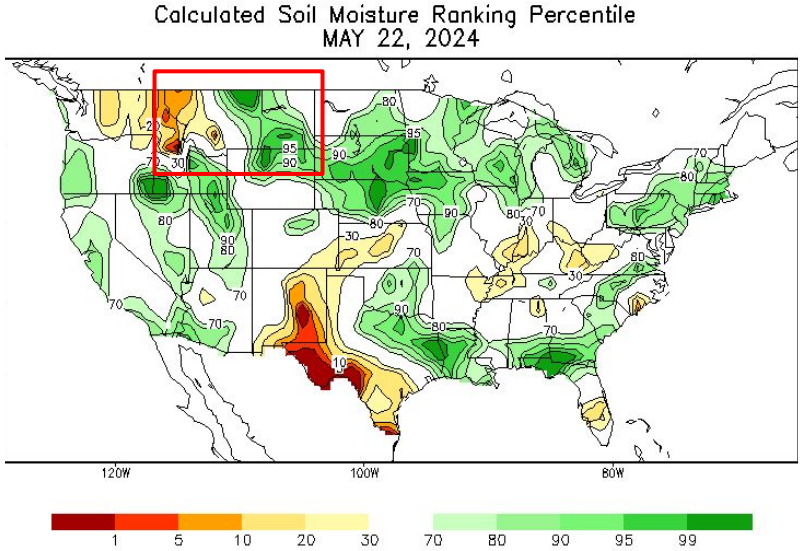
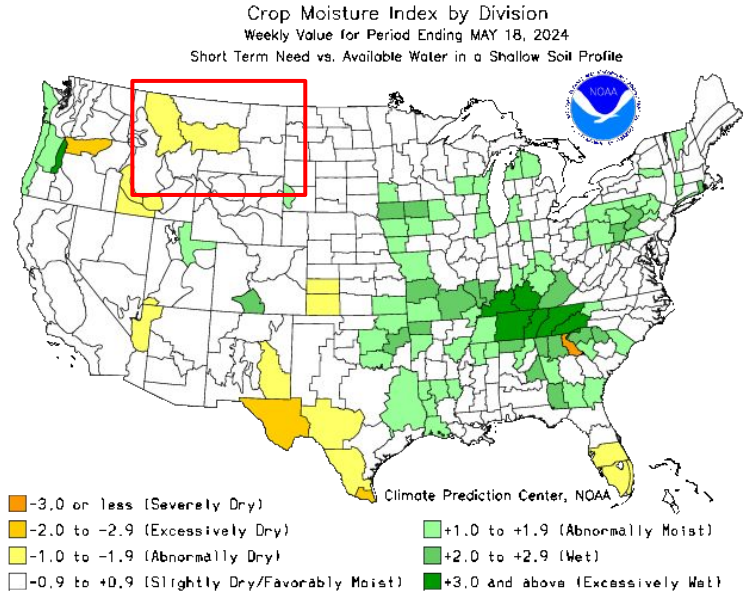


Image Caption: USGS 7-day average streamflow HUC map valid: May 22, 2024

Agricultural Impacts



- 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.

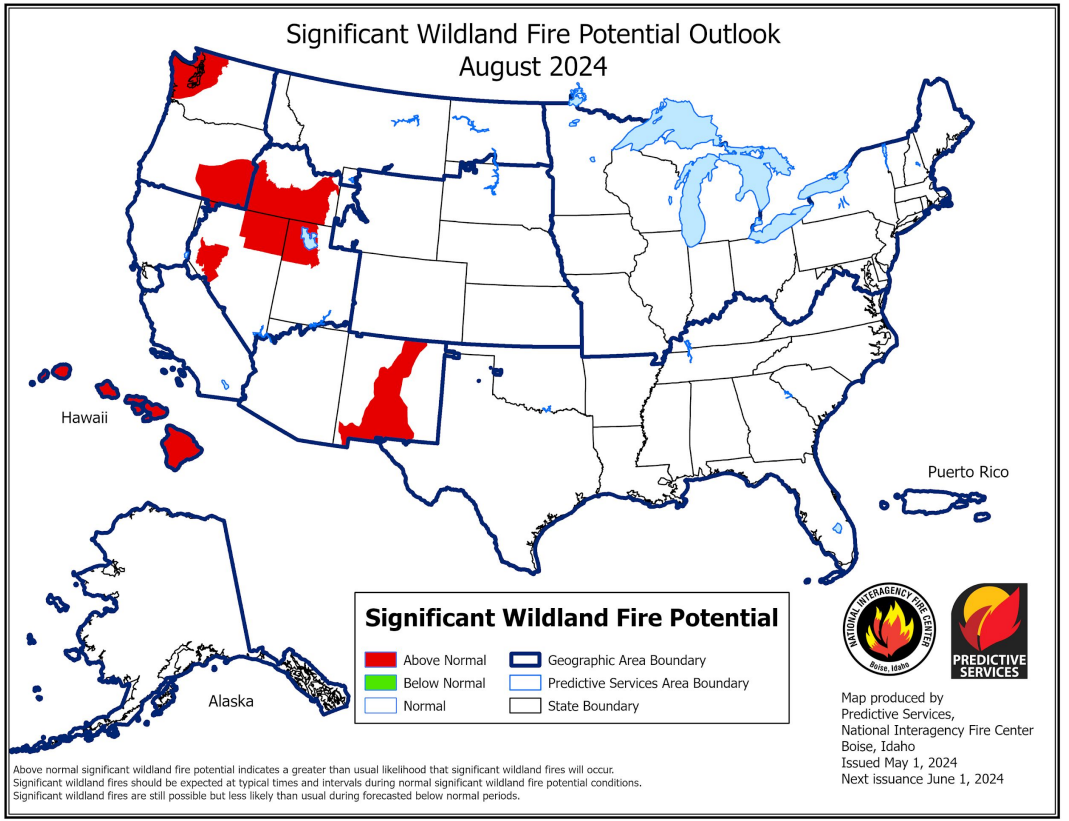


- The Crop Moisture Index includes western MT in an area identified as, “abnormally dry,” while soil moisture values for the rest of the state continue, “slightly dry/favorably moist.”

Fire Hazard Impacts

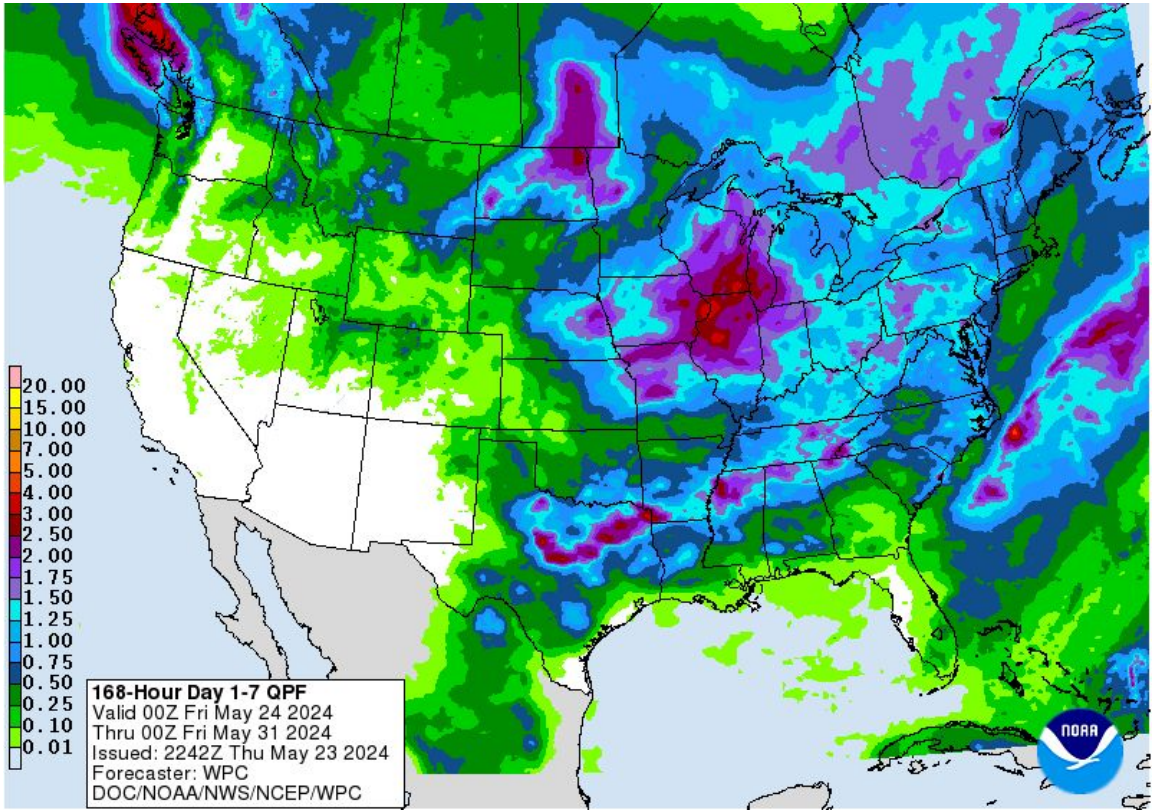
Link to [Wildfire Potential Outlooks from the National Interagency Coordination Center.]

- **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

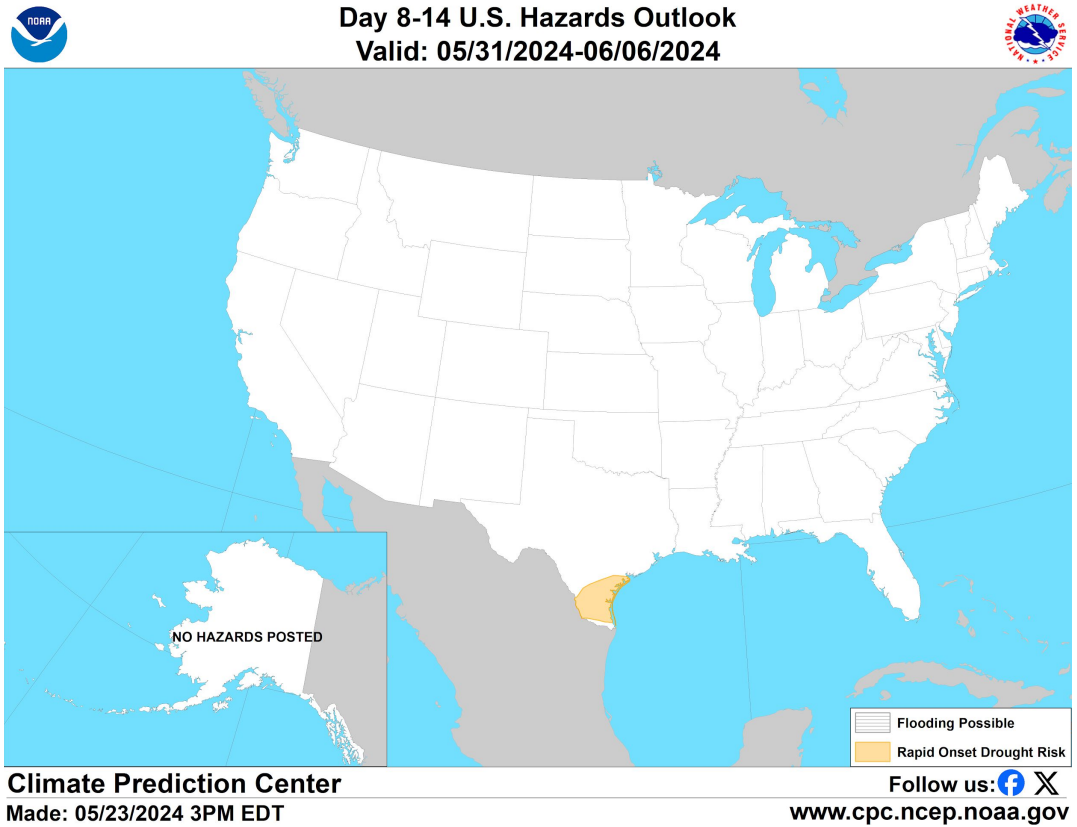
- During the week of, May 24-31, 2024, generally light precipitation amounts are forecast to fall over Montana.
- Just some mountain areas and far Southeast MT have the highest chances for receiving over 1 inch of precipitation.
- This is the wettest time of year in MT, and much of these precipitation amounts are near normal for this time of year.



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, May 31th through June 6th.

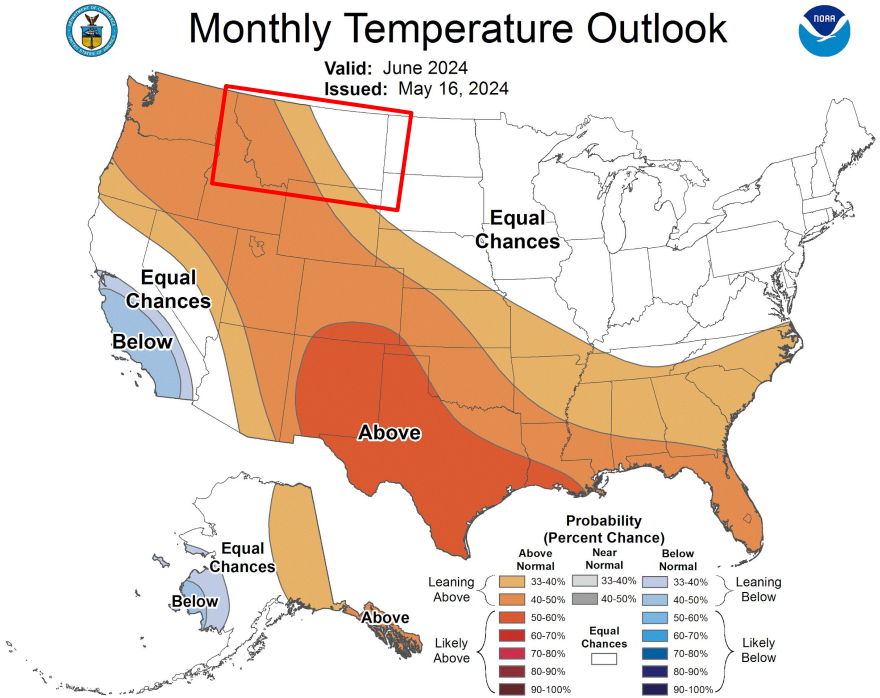


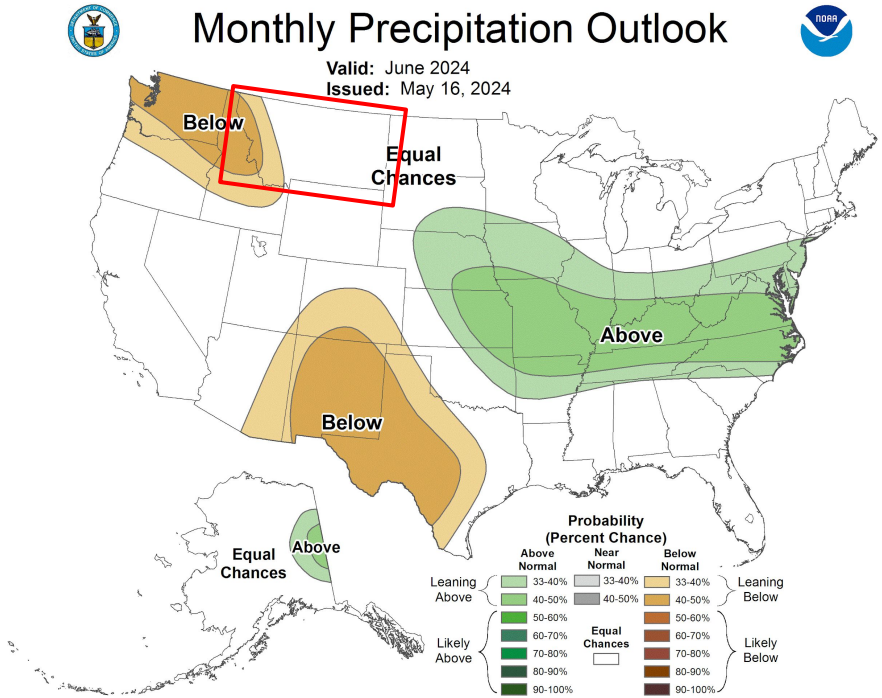
Long Range Outlooks

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

- Looking ahead to the month of June, there is a higher probability for the western two thirds of the state to experience warmer than normal temperatures, while the outlook shows equal chances for warmer or cooler than normal temperatures for the rest of the state.

- Western and portions of southwestern MT show a better chance for below normal moisture, while there are equal chances for above or below normal precipitation for the rest of MT.



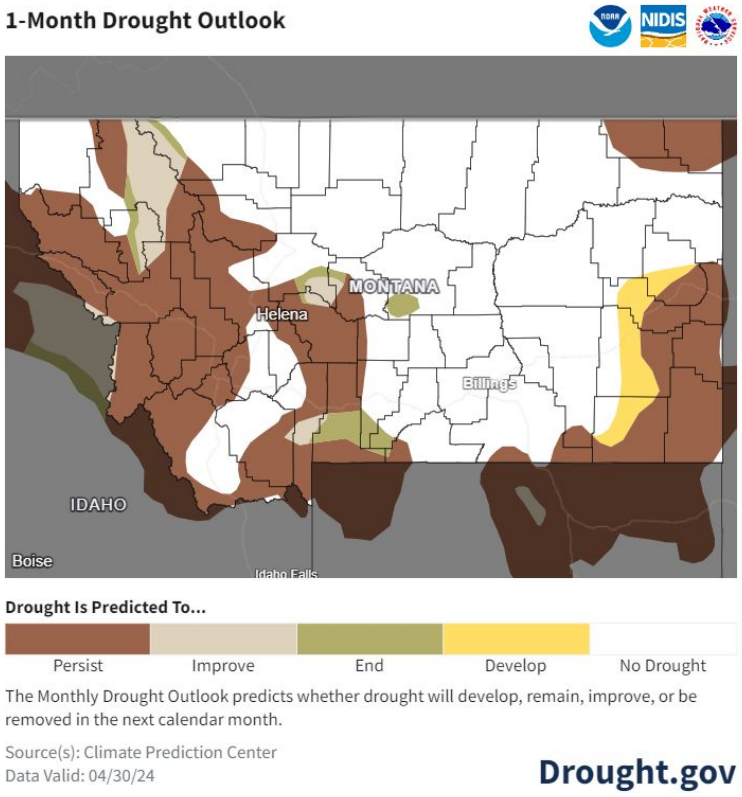


Drought Outlook

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 eastern MT
- **Improving:** Isolated areas of northwestern, central and southwestern MT
- **Ending:** Isolated areas of northwestern, central and south central MT

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

- 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 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 as we approach the Memorial Day Holiday, and the tourism season.

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, heavy spring rains could result in some areal flooding at any time.