



# Drought Information Statement for Montana

Valid April 13, 2024

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

Contact Information:

- No further updates to this product are planned, as D3 drought has ended.
- Please see all currently available products at <https://drought.gov/drought-information-statements>.
- Please visit <https://www.weather.gov/TFX/DroughtInformationStatement> for previous statements.



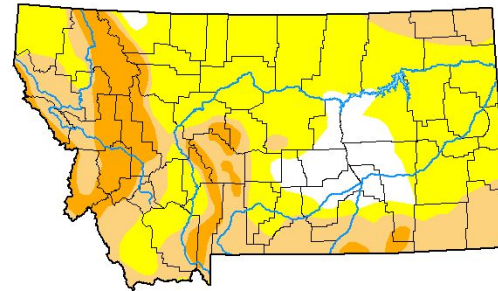


# U.S. Drought Monitor

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

- D3 Drought conditions have ended in Montana.
- Drought intensity and Extent
  - **D4 (Exceptional Drought)**: None occurring
  - **D3 (Extreme Drought)**: None occurring
  - **D2 (Severe Drought)**: A portion of western MT, with scattered areas across portions of central and southern MT
  - **D1 (Moderate Drought)**: Much of western and southern MT and portions of northeast MT
  - **D0: (Abnormally Dry)**: Most of the state

## U.S. Drought Monitor Montana



April 9, 2024

(Released Thursday, Apr. 11, 2024)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	9.22	90.78	40.42	13.21	0.00	0.00
Last Week 04-02-2024	5.76	94.24	41.30	16.51	1.00	0.00
3 Months Ago 01-09-2024	30.69	69.31	22.34	3.05	0.00	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 09-05-2023	56.28	43.72	37.28	23.21	9.51	0.00
One Year Ago 04-11-2023	29.07	70.93	42.29	7.91	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>

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CPC/NOAA



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



National Oceanic and  
Atmospheric Administration

U.S. Department of Commerce

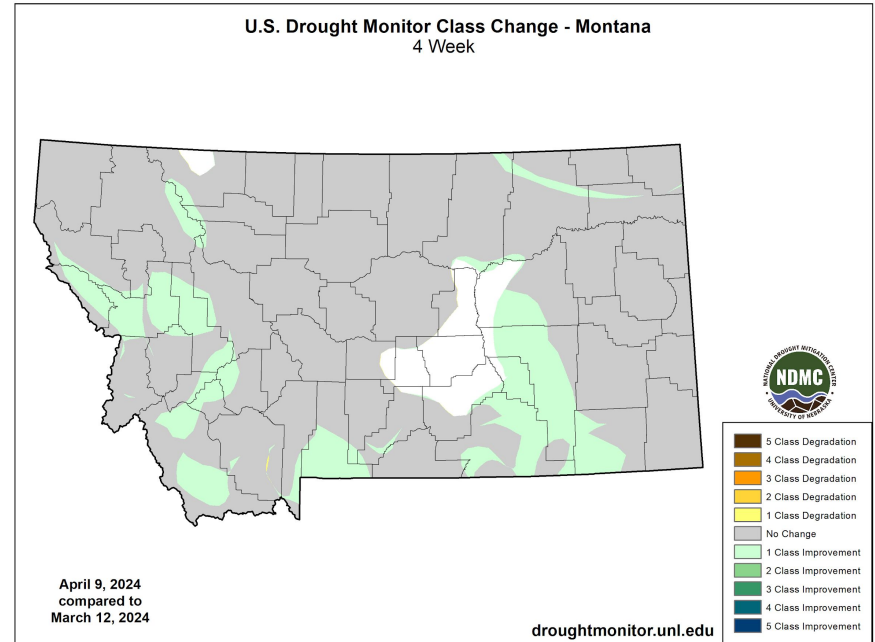
National Weather Service  
Great Falls, Montana



# Recent Change in Drought Intensity

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

- Four Week Drought Monitor Class Change.
  - Drought Worsened: No locations worsened, during the past four weeks.
  - No Change: No change in drought conditions over the past month were observed over portions of the state.
  - Drought Improved: Areas of improvement occurred over western, central and eastern MT.

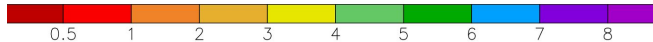
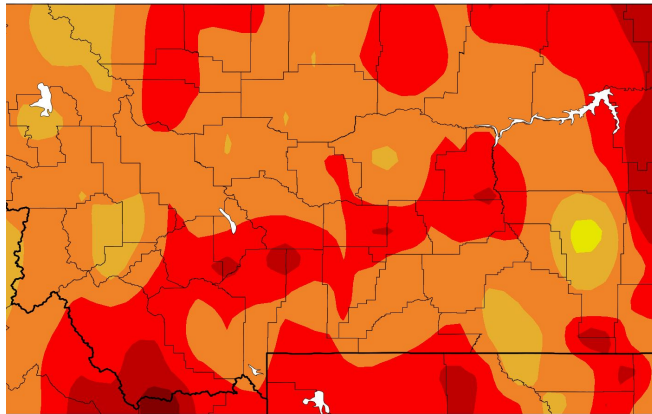




# Precipitation

- During the past month, most of the state received 1" to 2" of precipitation, with some isolated areas of western and eastern MT receiving 3" to 4". Some areas of the state received less than 1" of moisture.
- Portions of northwest, southwest and eastern MT received below average precipitation. Portions of southern MT received only 25% to 50% of normal precipitation values.

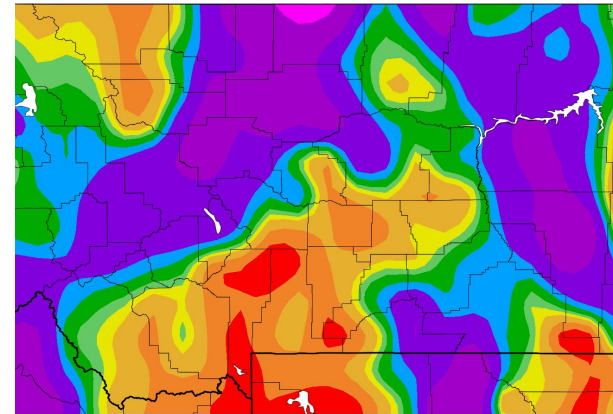
Precipitation (in)  
3/12/2024 – 4/10/2024



2024 at HPRCC using provisional data.

NOAA Region

Percent of Normal Precipitation (%)  
3/12/2024 – 4/10/2024



2024 at HPRCC using provisional data.

NOAA Region



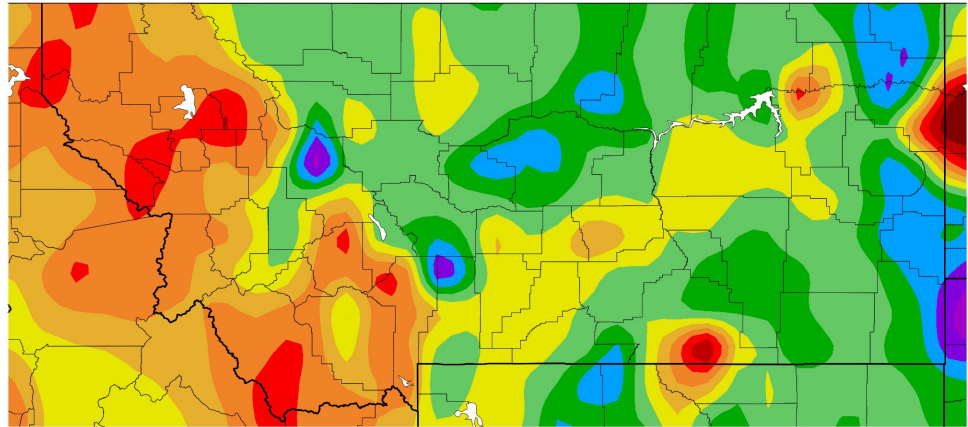




# Temperature

Departure from Normal Temperature (F)  
3/12/2024 – 4/10/2024

- Western and southwestern Montana, as well as, isolated areas of the rest of the state, experienced warmer than normal temperatures. Most of north central, central and eastern Montana, experienced below normal temperatures.



Generated 4/11/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

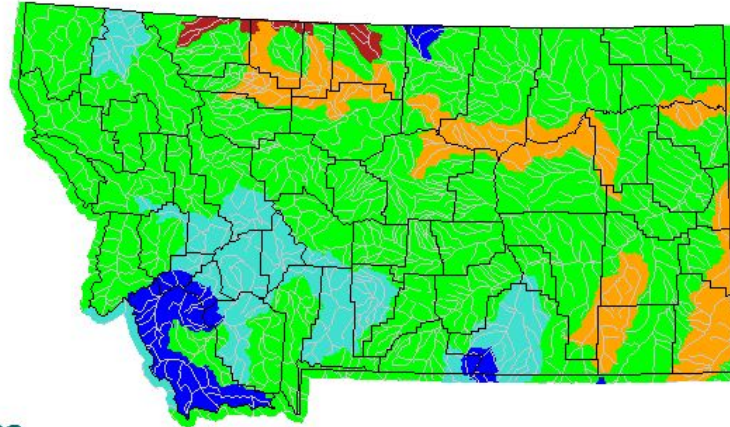




# Hydrologic Conditions and Impacts

- The average streamflow for Most of Montana, is at a level that is considered normal for this time of year.
- Much above normal streamflow has been measured for portions of the Upper Missouri Basin, as well as, portions of the Milk and Yellowstone Basins.
- We continue to monitor for any periods of potential flooding that may occur.

Wednesday, April 10, 2024



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		

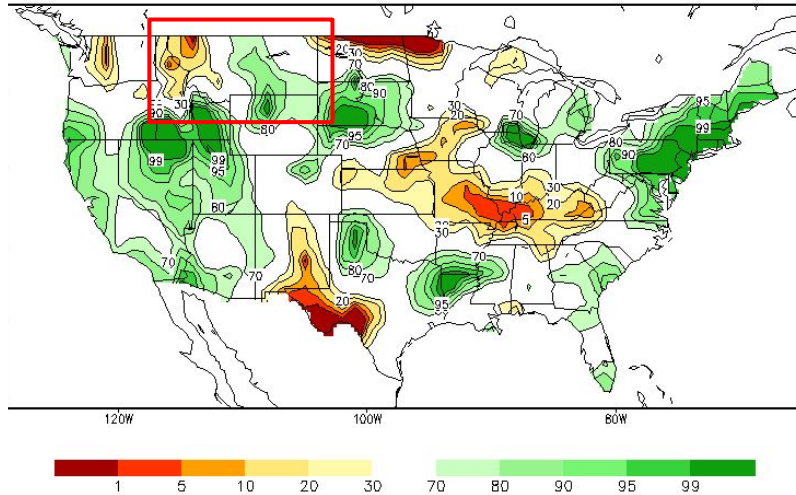
Image Caption: USGS 7 day average streamflow HUC map valid, April 10, 2024



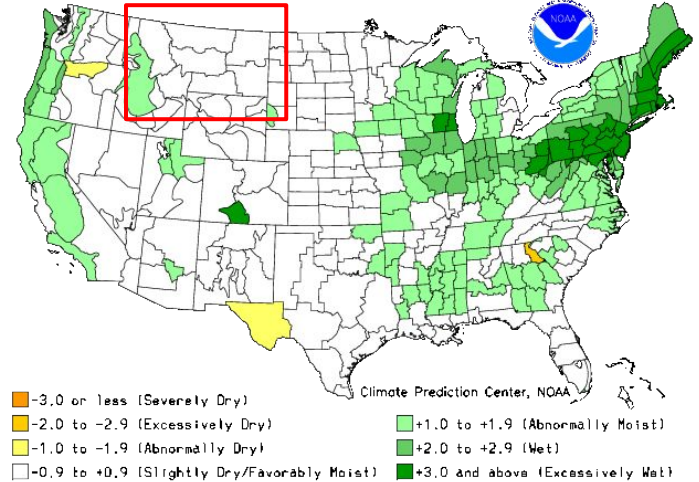


# Agricultural Impacts

### Calculated Soil Moisture Ranking Percentile APR 10, 2024



### Crop Moisture Index by Division Weekly Value for Period Ending APR 6, 2024 Short Term Need vs. Available Water in a Shallow Soil Profile



- Soil Moisture Ranking Percentile continues very low across northwestern MT, where soil moisture values are only in the 0 to 10 percentile range.

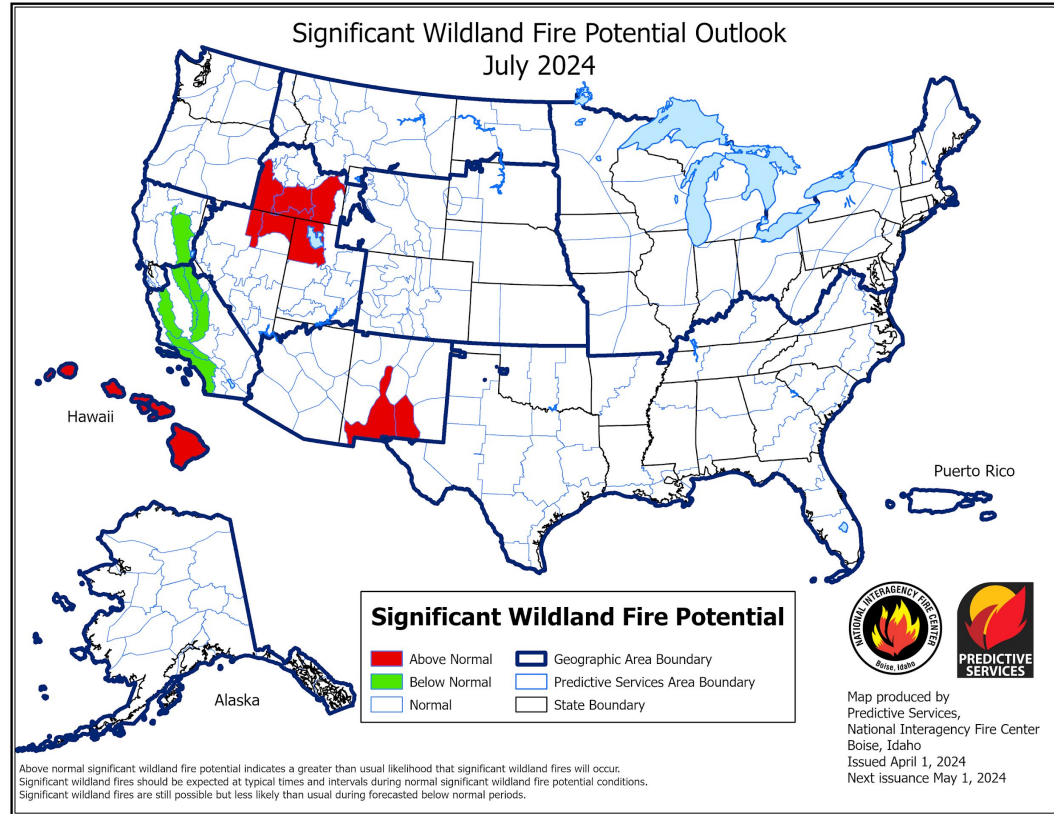




# Fire Hazard Impacts

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

- Fire impacts are possible on grasslands a few weeks after they dry out.
- For the mountains, fire season will occur after the snow melts out.

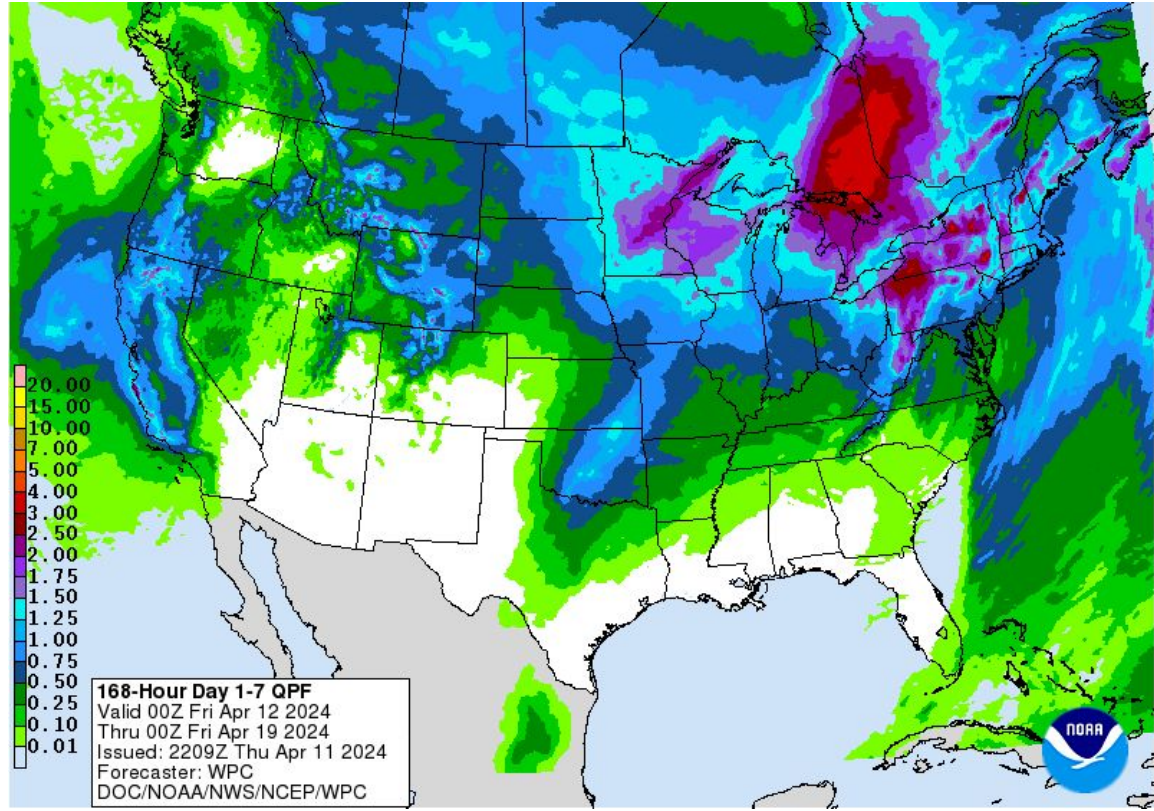






# Seven Day Precipitation Forecast

- During this period, the mountains receive the most moisture, with forecast precipitation amounts in the 1" to 2" range.
- Most lower elevation areas receive 0.25" to 0.5" of liquid precipitation.





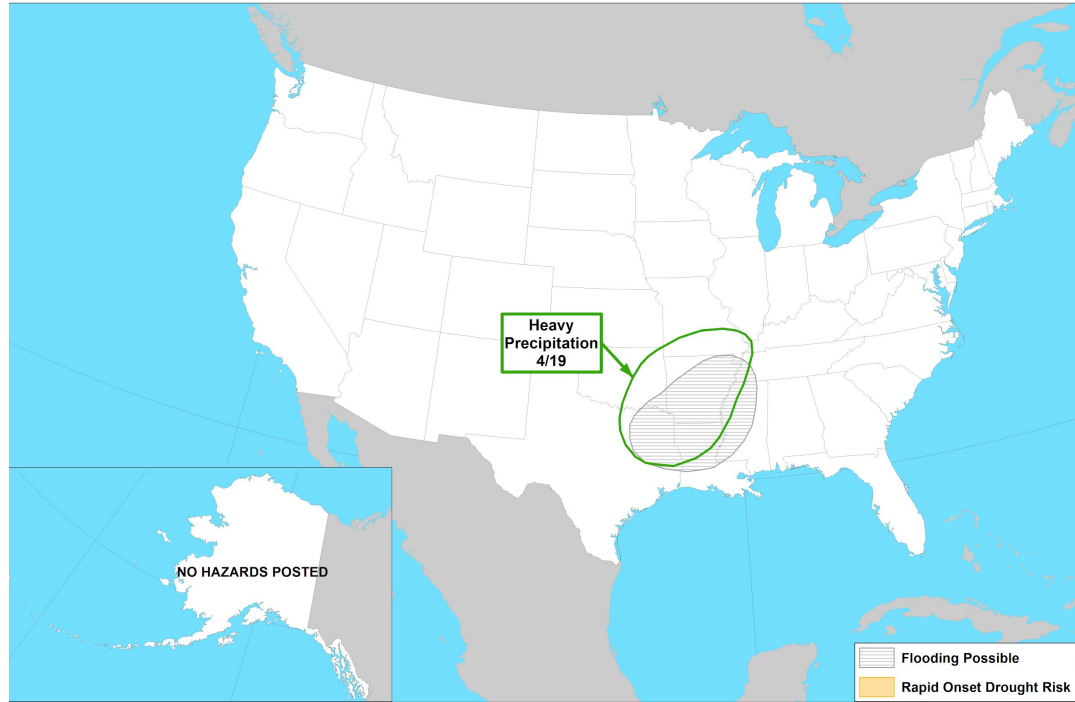
# Rapid Onset Drought Outlook

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, April 19th to 25th.



Day 8-14 U.S. Hazards Outlook  
Valid: 04/19/2024-04/25/2024



Climate Prediction Center  
Made: 04/11/2024 3PM EDT

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

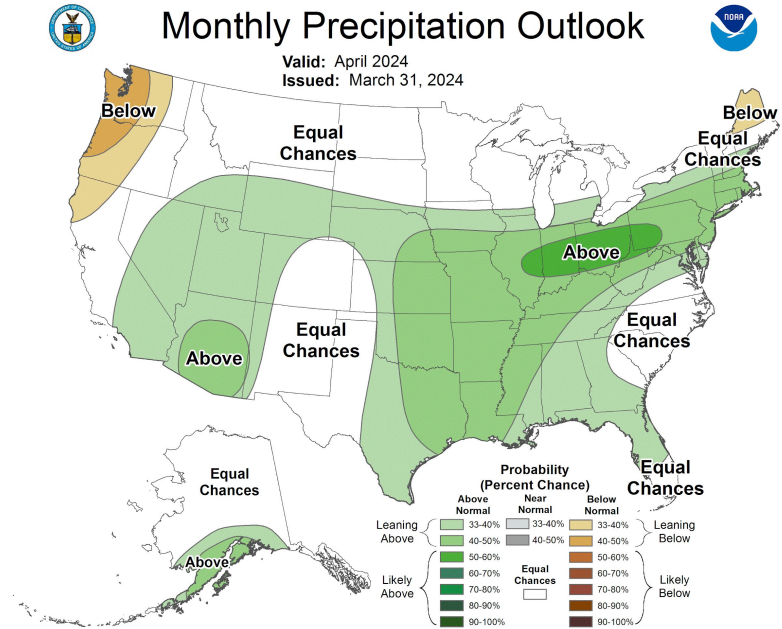
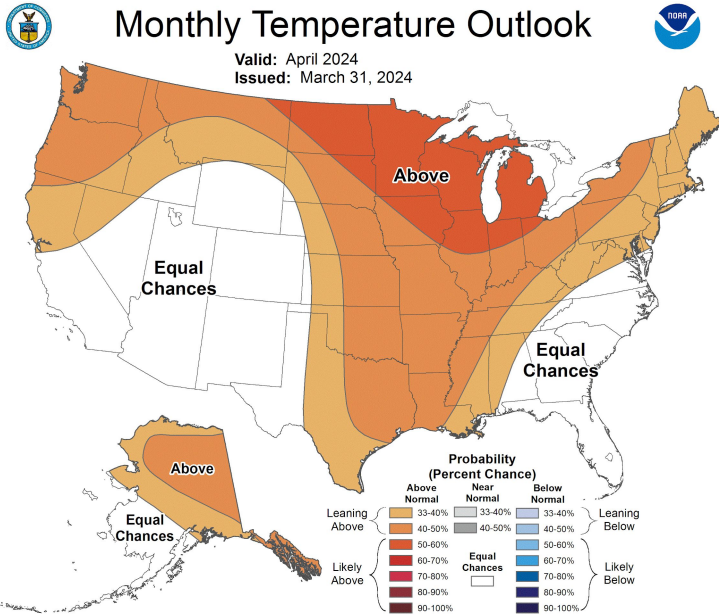




# Long Range Outlooks

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

- For the month of April, above normal temperatures are favored for Montana.
- Near normal chances for precipitation are favored across the state.



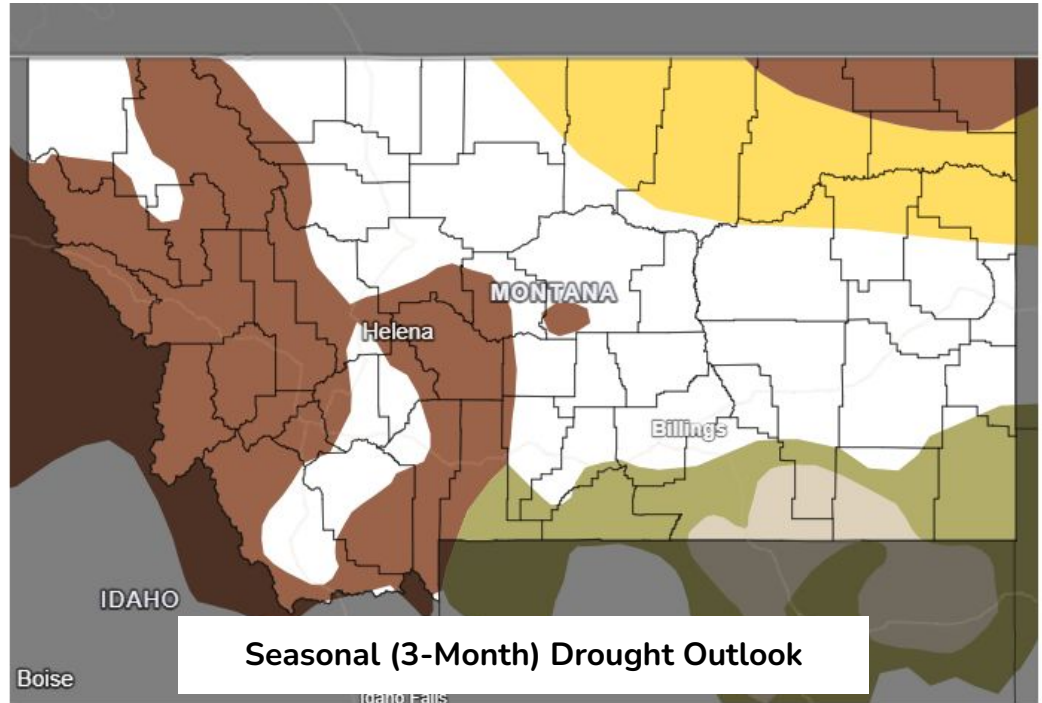


# Drought Outlook

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

- Drought conditions are predicted to continue over western, southwestern, portions of central, and far northeastern MT.
- Some expansion of drought conditions is possible across northeastern and portions of north central MT.

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



Drought Is Predicted To...



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

- Mountain snowpack continues below normal for this time of year
- Our mountains are below normal in terms of SWE. There's a real concern for water supply issues as we move through the mid and late summer period, assuming we don't receive significant amounts of high elevation spring snow.

## Agricultural Impacts

- Possible impacts to crops and grasslands

## Fire Hazard Impacts

- Possible concerns, later this spring, in the event of rapid melting, during a period of little spring moisture replacement

## Other Impacts

- Impacts to aquatic life and 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. Flood insurance needs to be purchased 30 days in advance.

