

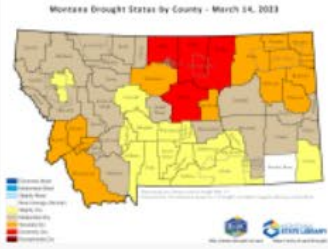


Photo by Patti Black on Unsplash

Montana Drought Status

Troy Blandford

March 7, 2024



2023-01: Montana Drought Status by County

2023-02: Montana Drought Status by County

2023-03: Montana Drought Status by County

2023-04: Montana Drought Status by County

2023-05: Montana Drought Status by County

2023-06: Montana Drought Status by County

Moisture status by county for January 2023

Moisture Status by County for February 2023

Moisture Status by County for March 2023

Moisture Status by County for April 2023

Moisture Status by County for May 2023

Moisture Status by County for June 2023

[View item details](#)

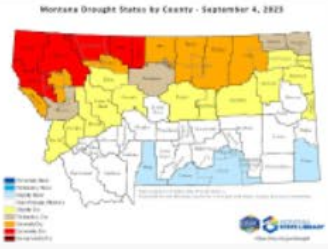
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2023-07: Montana Drought Status by County

2023-08: Montana Drought Status by County

2023-09: Montana Drought Status by County

2023-10: Montana Drought Status by County

2023-11: Montana Drought Status by County

2023-12: Montana Drought Status by County

Moisture Status by County for July 2023

Moisture status by county August 2023

Moisture Status by County for September 2023

Moisture Status by County for October 2023

Moisture Status by County for November 2023

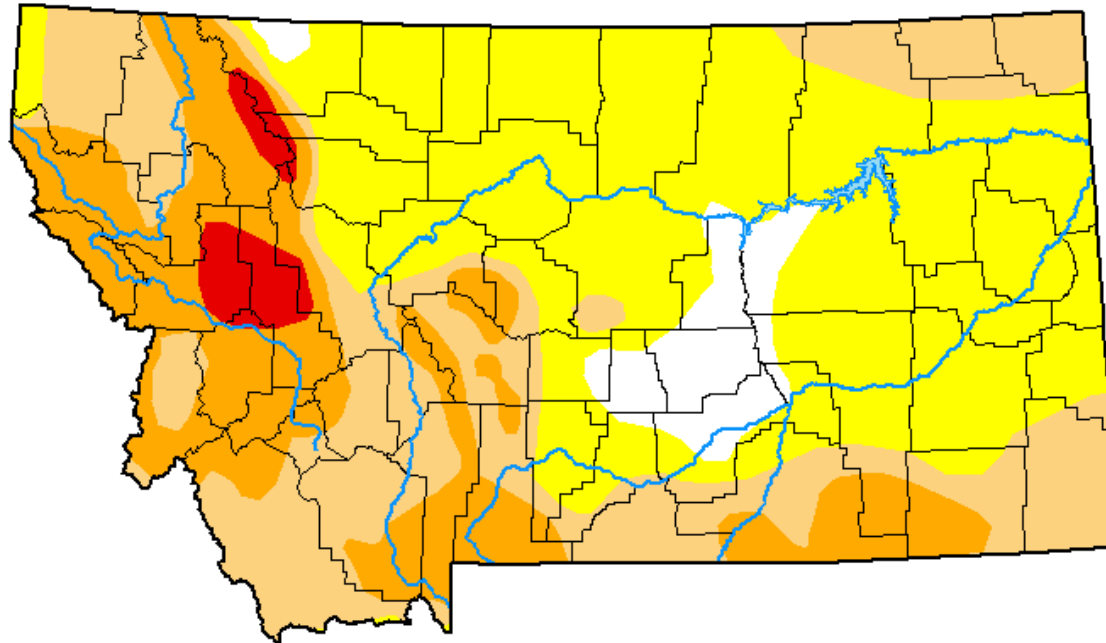
Moisture Status by County for December 2023

Synopsis







- Snow arrives (~10/25) but comes and goes...
 - In contrast, last year snow arrived and hung around.
- Slow start to the season. November and December below average precipitation.
- Weekly changes have been made to the US Drought Monitor Map (mostly degradations).
 - In contrast, last year primarily status quo or slight improvements December – March.
- Moisture conditions positive as of late (30-45 days)

U.S. Drought Monitor Montana

March 5, 2024
(Released Thursday, Mar. 7, 2024)
Valid 7 a.m. EST



Intensity:

-  None
-  D0 Abnormally Dry
-  D1 Moderate Drought
-  D2 Severe Drought
-  D3 Extreme Drought
-  D4 Exceptional Drought

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>

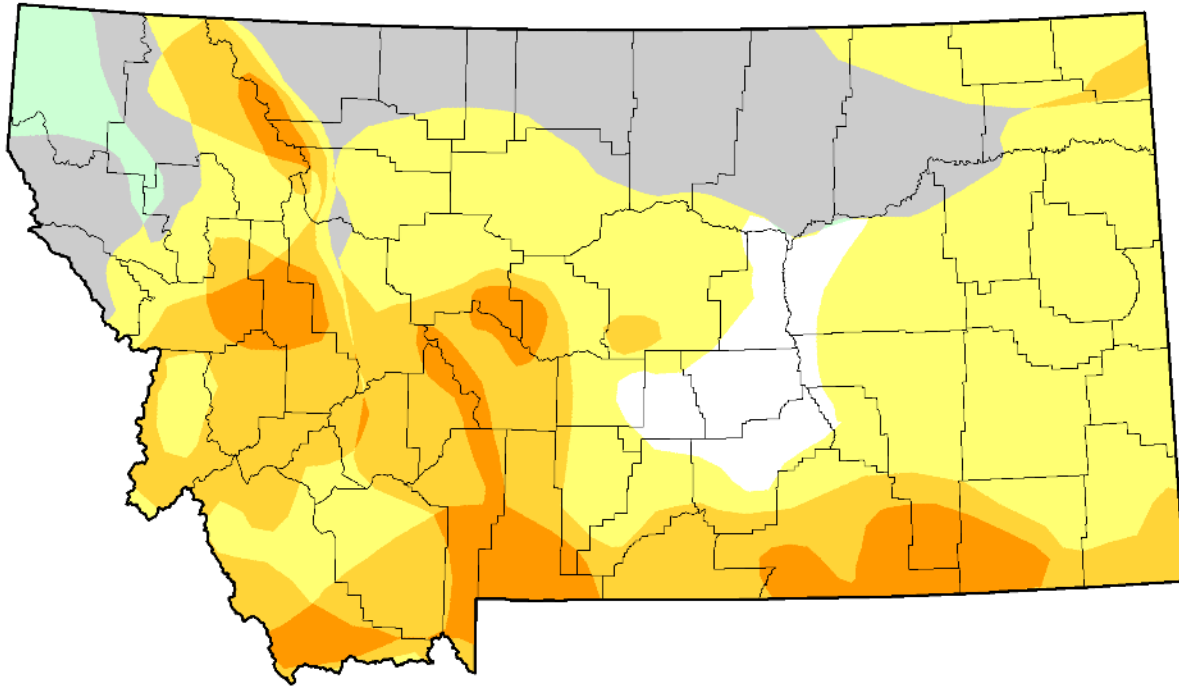
Author:

Curtis Riganti
National Drought Mitigation Center



droughtmonitor.unl.edu

U.S. Drought Monitor Class Change - Montana 12 Week



February 27, 2024
compared to
December 5, 2023

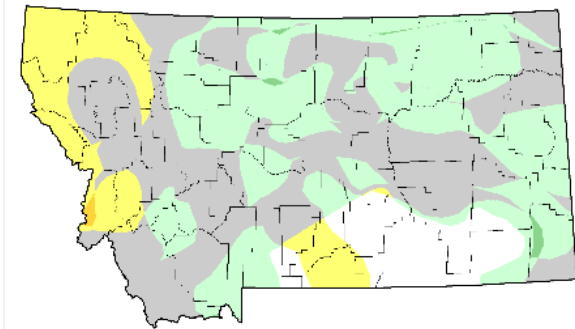
droughtmonitor.unl.edu



- 5 Class Degradation
- 4 Class Degradation
- 3 Class Degradation
- 2 Class Degradation
- 1 Class Degradation
- No Change
- 1 Class Improvement
- 2 Class Improvement
- 3 Class Improvement
- 4 Class Improvement
- 5 Class Improvement

Last year at this time

U.S. Drought Monitor Class Change - Montana 12 Week



March 7, 2023
compared to
December 13, 2022

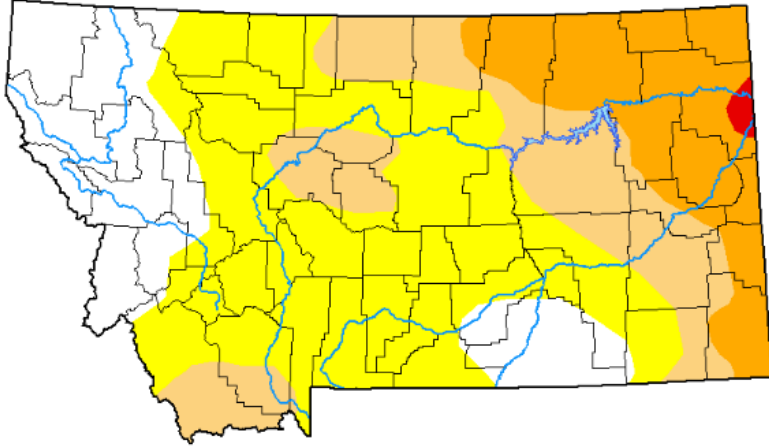
droughtmonitor.unl.edu



- 5 Class Degradation
- 4 Class Degradation
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- 2 Class Degradation
- 1 Class Degradation
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- 4 Class Improvement
- 5 Class Improvement

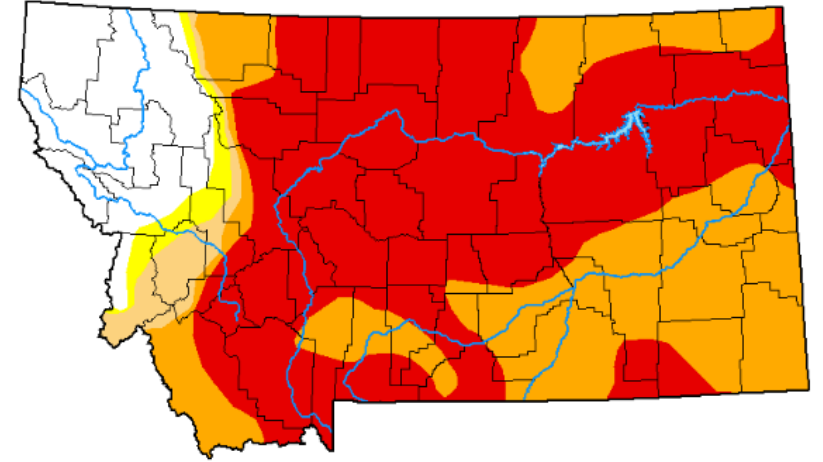
March 2021

Conditions steadily deteriorated for the remainder of the year, with nearly the entire state in Extreme Drought by August.



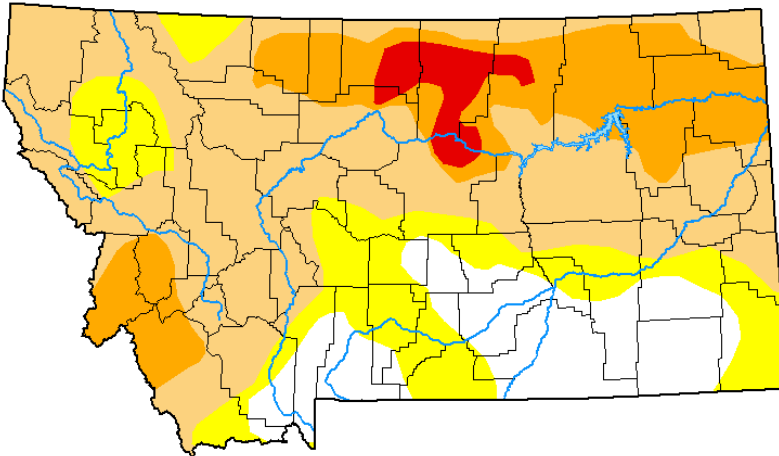
March 2022

Conditions slowly improved through June (except NC), then deteriorated into early Fall.



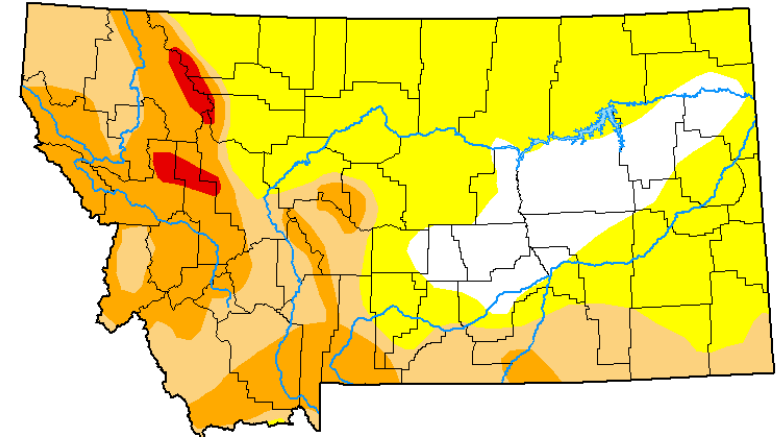
March 2023

Lookin' pretty good by June, then typical drying over the summer.



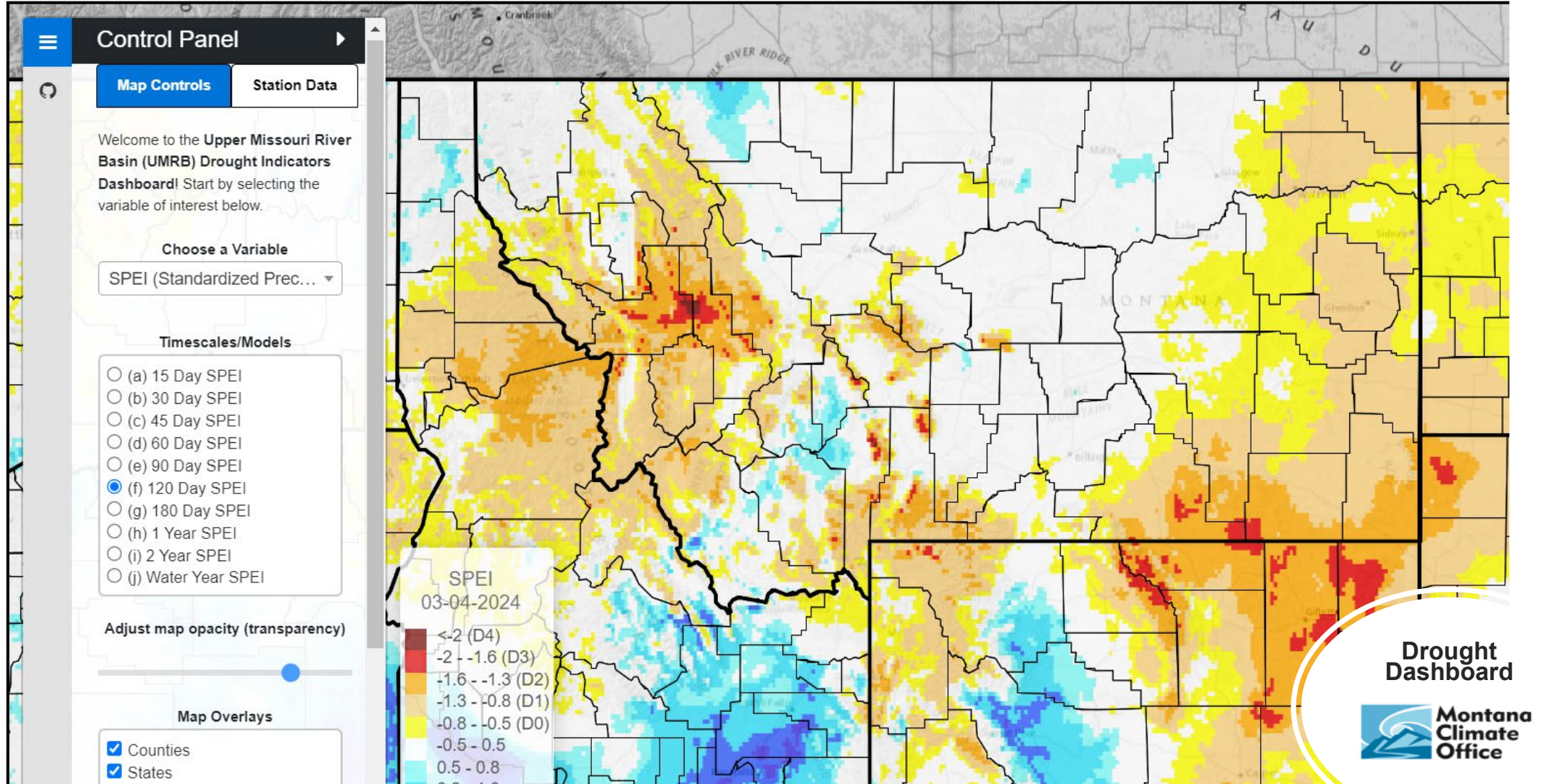
March 2024

How does this play out?



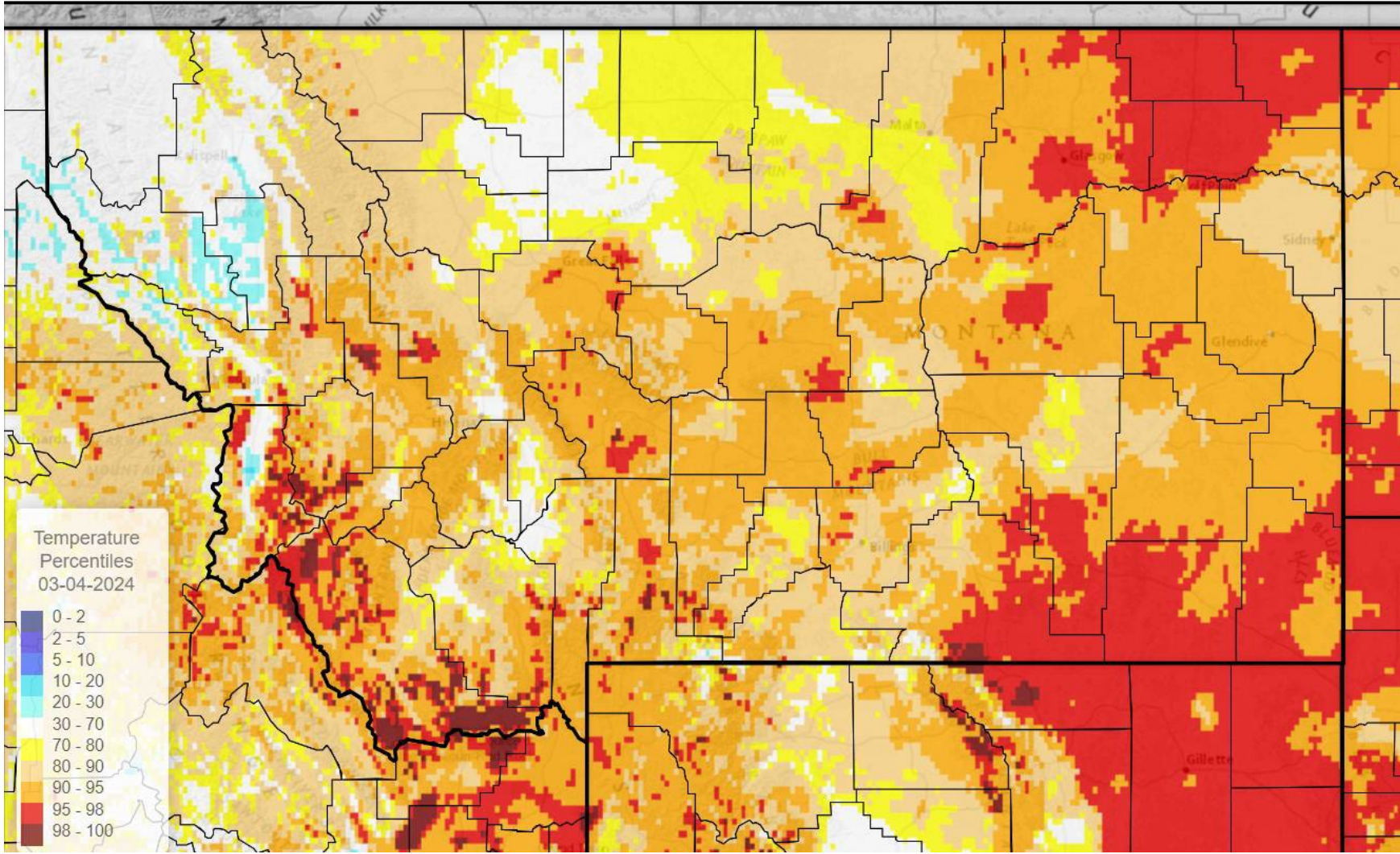
Drought Indicators Dashboard

120 Day SPEI for 03-04-2024

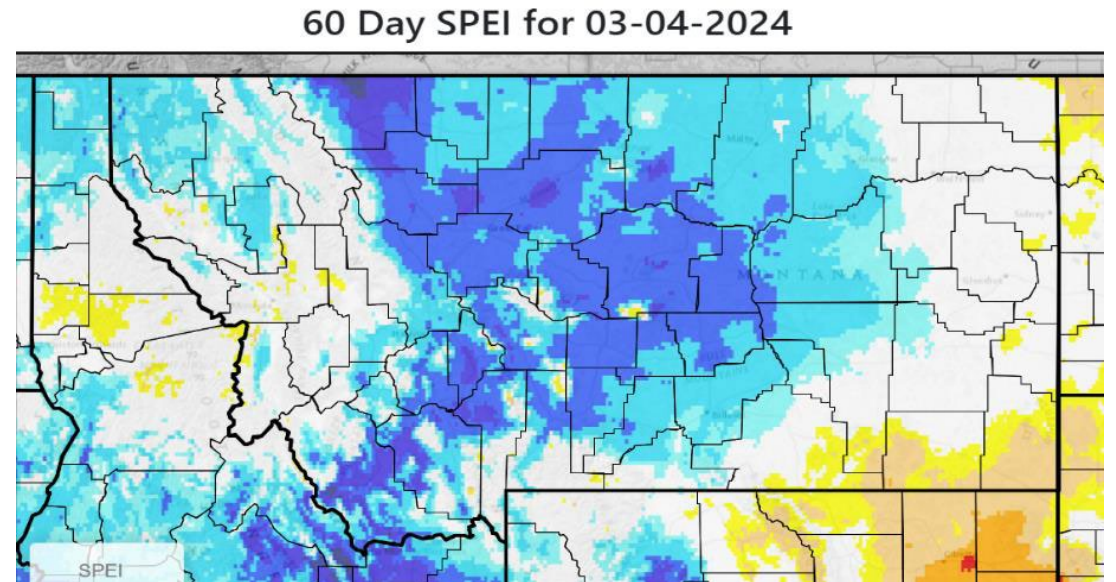


Temperature

120 Day Percentile for 03-04-2024



- The current drought map reflects longer range metrics. Expect this to change as spring progresses and short-term moisture becomes more crucial.



Important Reminders



February

is the lowest precipitation month for most counties



March

Many counties east of the divide receive more precipitation in May or June than Jan, Feb, and March combined.



April

Quarter 2 (April, May, June) accounts for 35-45% of annual precipitation for most counties

- Q1 (Oct, Nov, Dec) accounts for 32% of the annual precipitation in Lincoln, Sanders, and Mineral



May

All but three counties receive the largest portion of annual precipitation in May or June

- November and December are the largest precipitation months for Lincoln, Sanders, and Mineral



June

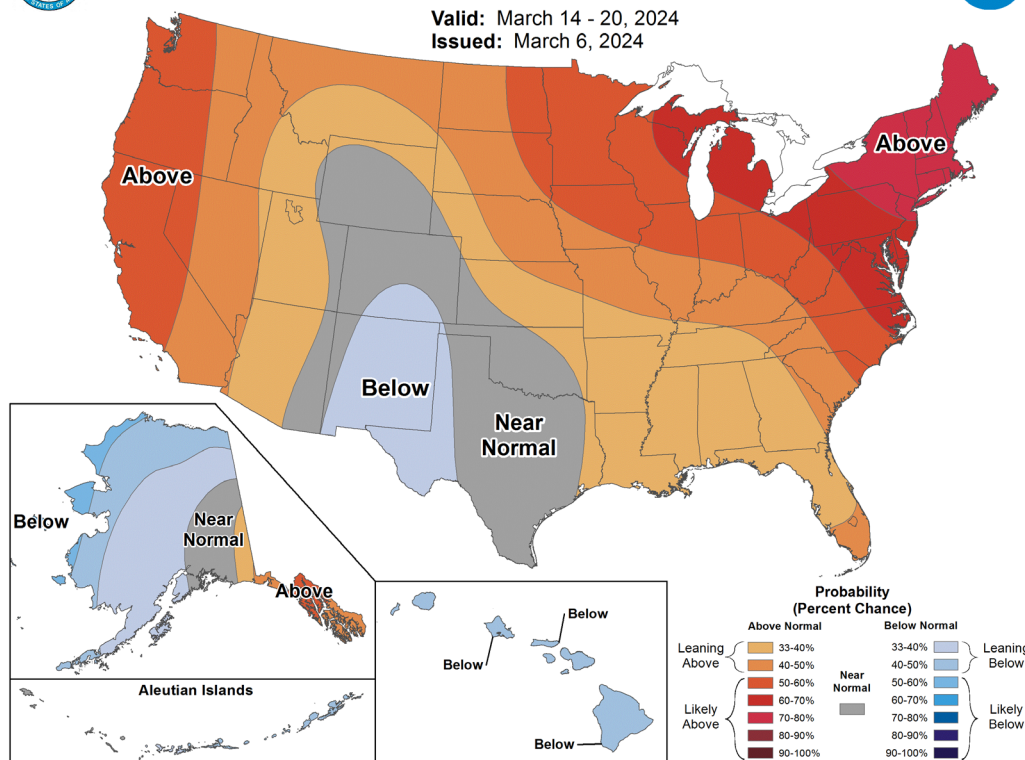
is the biggest precipitation month for most counties.



8-14 Day Temperature Outlook



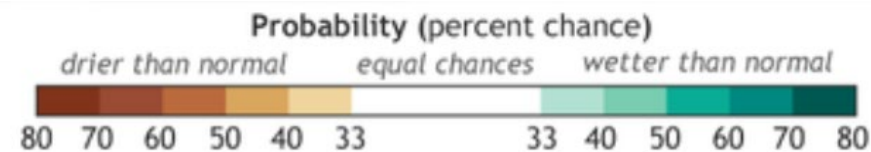
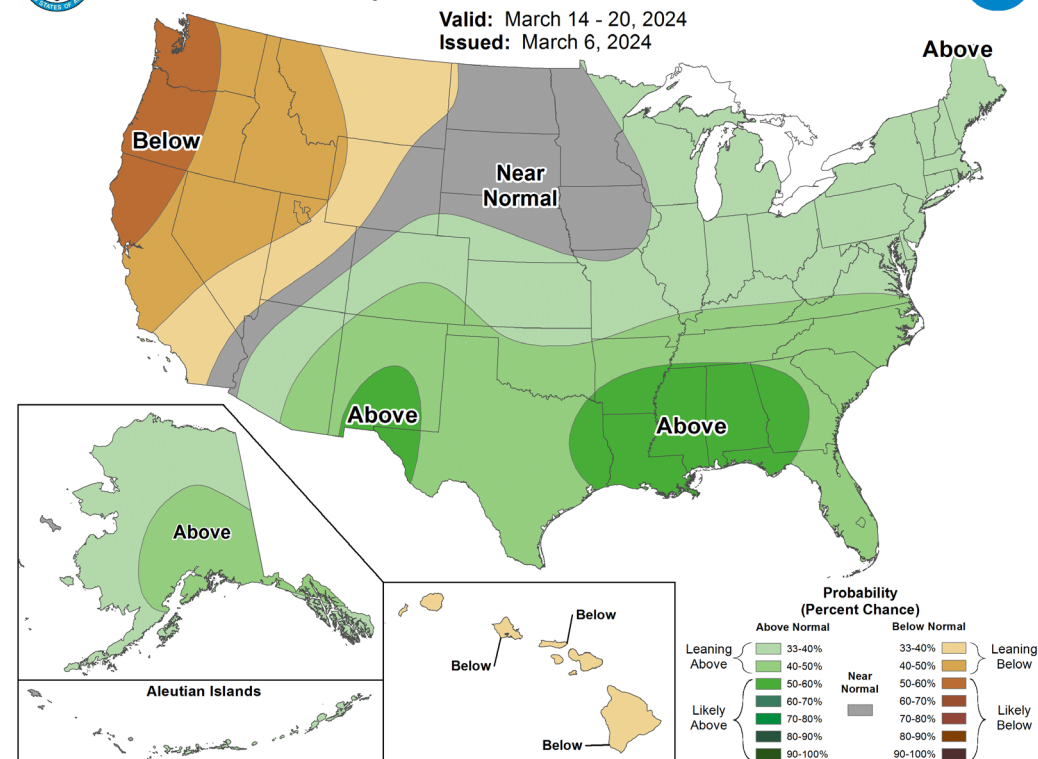
Valid: March 14 - 20, 2024
Issued: March 6, 2024



8-14 Day Precipitation Outlook



Valid: March 14 - 20, 2024
Issued: March 6, 2024

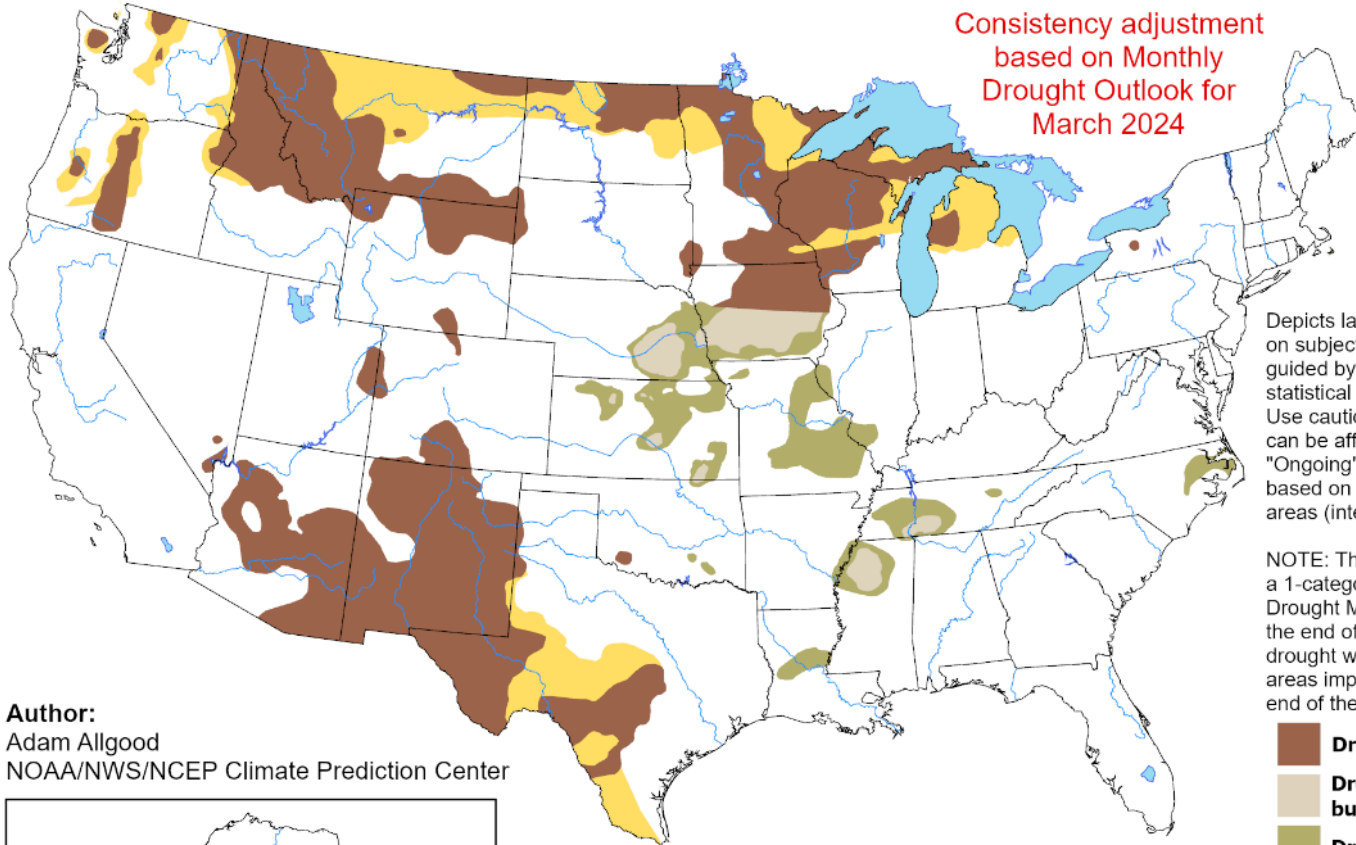


U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for March 1 - May 31, 2024
Released February 29, 2024

Consistency adjustment
based on Monthly
Drought Outlook for
March 2024

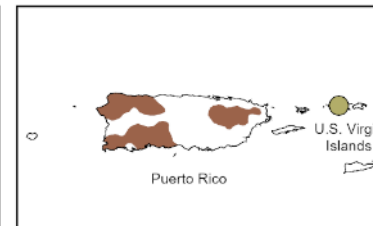
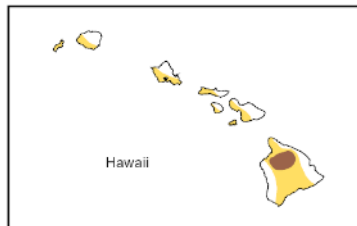


Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

- Drought persists**
- Drought remains, but improves**
- Drought removal likely**
- Drought development likely**
- No drought**

Author:
Adam Allgood
NOAA/NWS/NCEP Climate Prediction Center

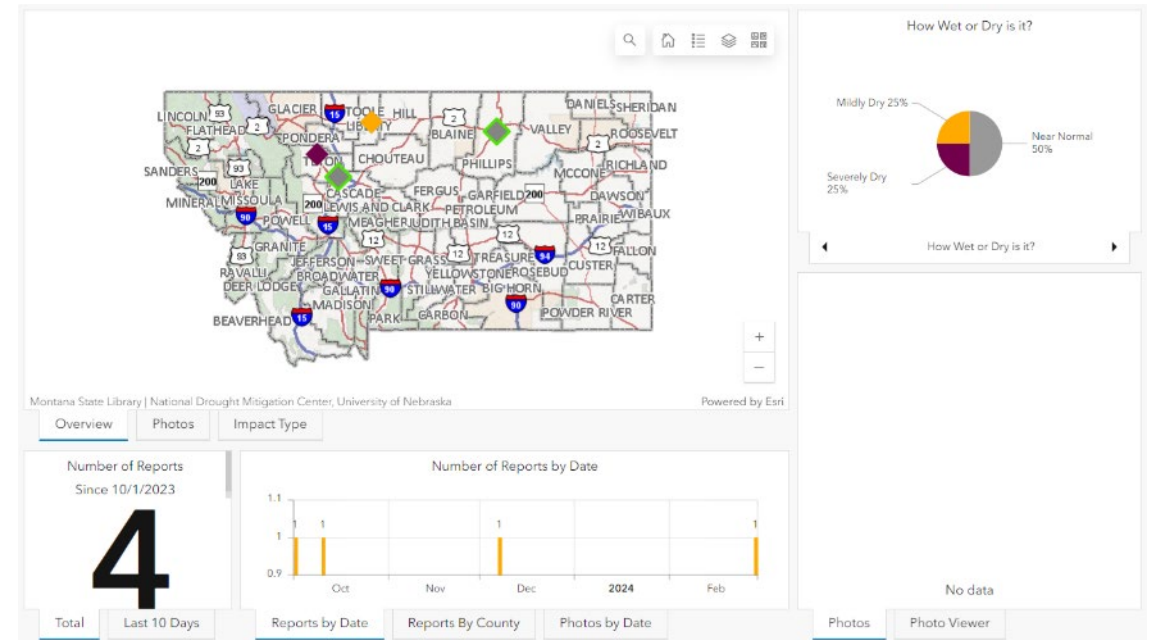


<https://go.usa.gov/3eZ73>

Montana Drought Impact Reporter

Reports received since Jan. 1, 2023

- **Liberty County 2/29**– mildly dry
“Topsoil moisture seems adequate, but there was recent snow melt with minimal moisture infiltration due to frozen soils. As a result, subsoils are still rather dry, which may impact decisions to re-crop and also cause crop stress later in growing season. Winter wheat and pastures are still in winter dormancy at this time. Spring planting for most crops still 4 to 8 weeks away.”



Takeaways

What to watch for this Spring



Will the snow accumulation season finish strong?



Do above average temperatures continue through Spring?



How flashy is Spring precipitation?



How does soil moisture respond?



Above normal precipitation and reasonable temperatures are needed the next three months for a favorable drought situation before summer.

Thank you.
Questions?

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