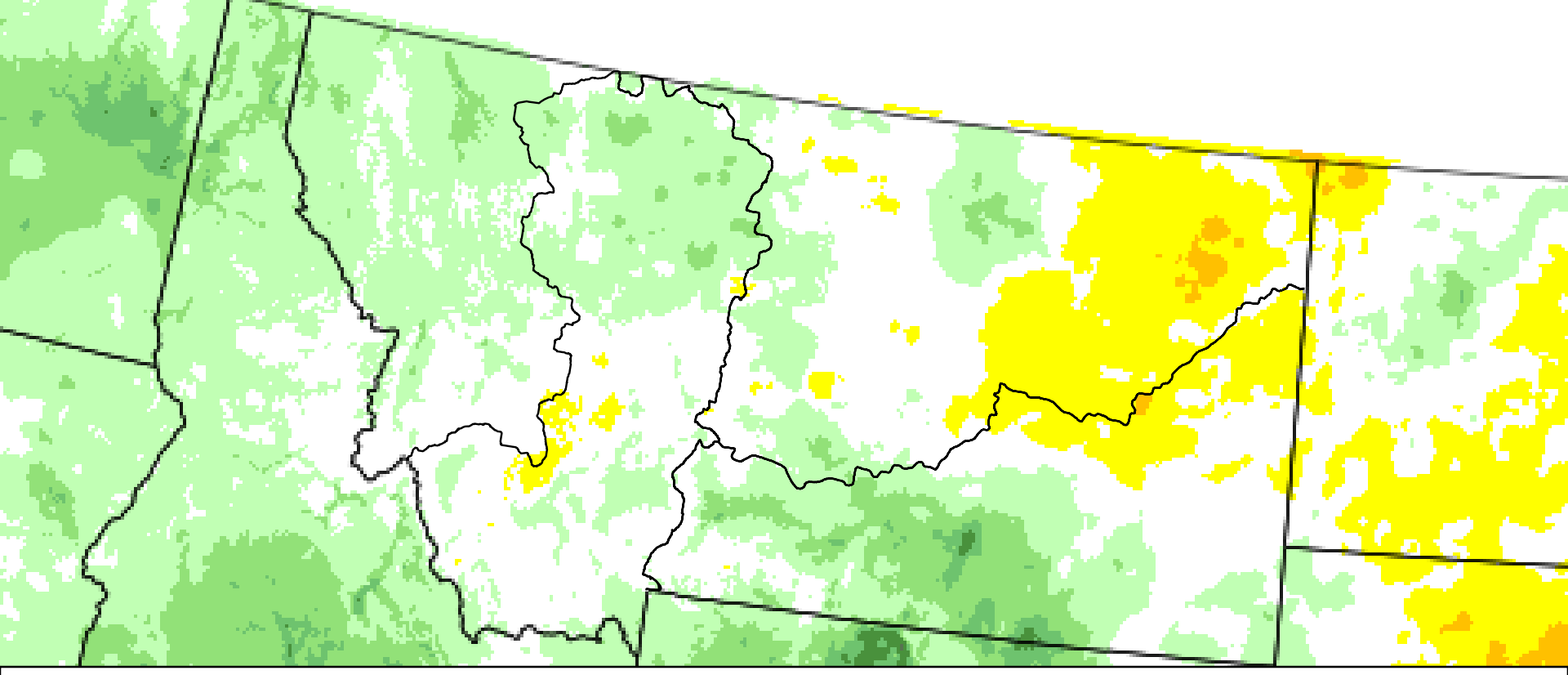
Montana DWSAC Briefing

August 30, 2017

Weather-Ready Nation

National Oceanic and Atmospheric Administration



Aug 16 – Jul 17 Precip Anomaly

% of Average Precipitation

0	50 - 70	150 - 170
1 - 10	70 - 90	170 - 200
11 - 20	90 - 110	200 - 300
20 - 30	110 - 130	300 - 400
30 - 50	130 - 150	> 400

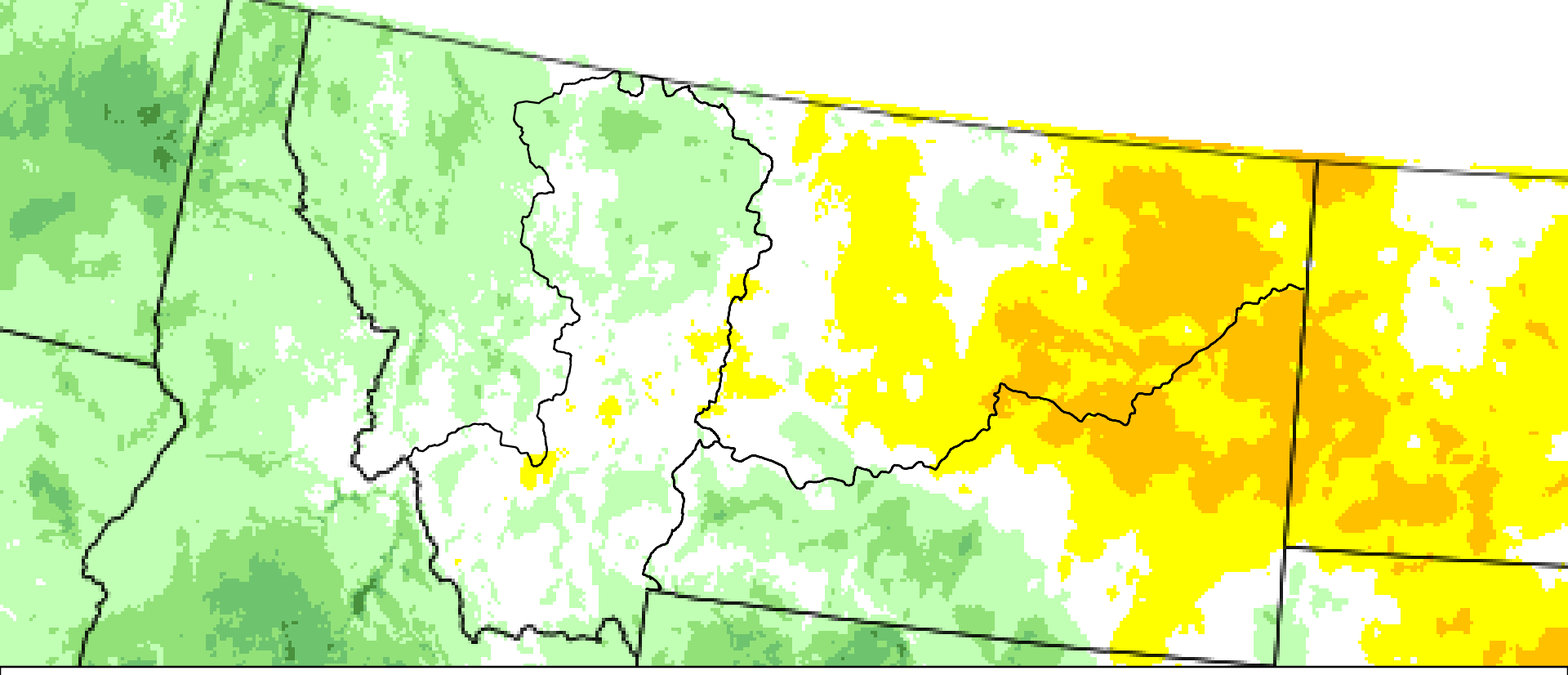
Montana: Aug 2016 – Jul 2017

17th Warmest on Record

Avg Temp	20th Century Average	Departure
43.3°F	41.1°F	2.2°F

47th Wettest on Record

Precip	20th Century Average	Departure
19.35”	18.67”	0.68”



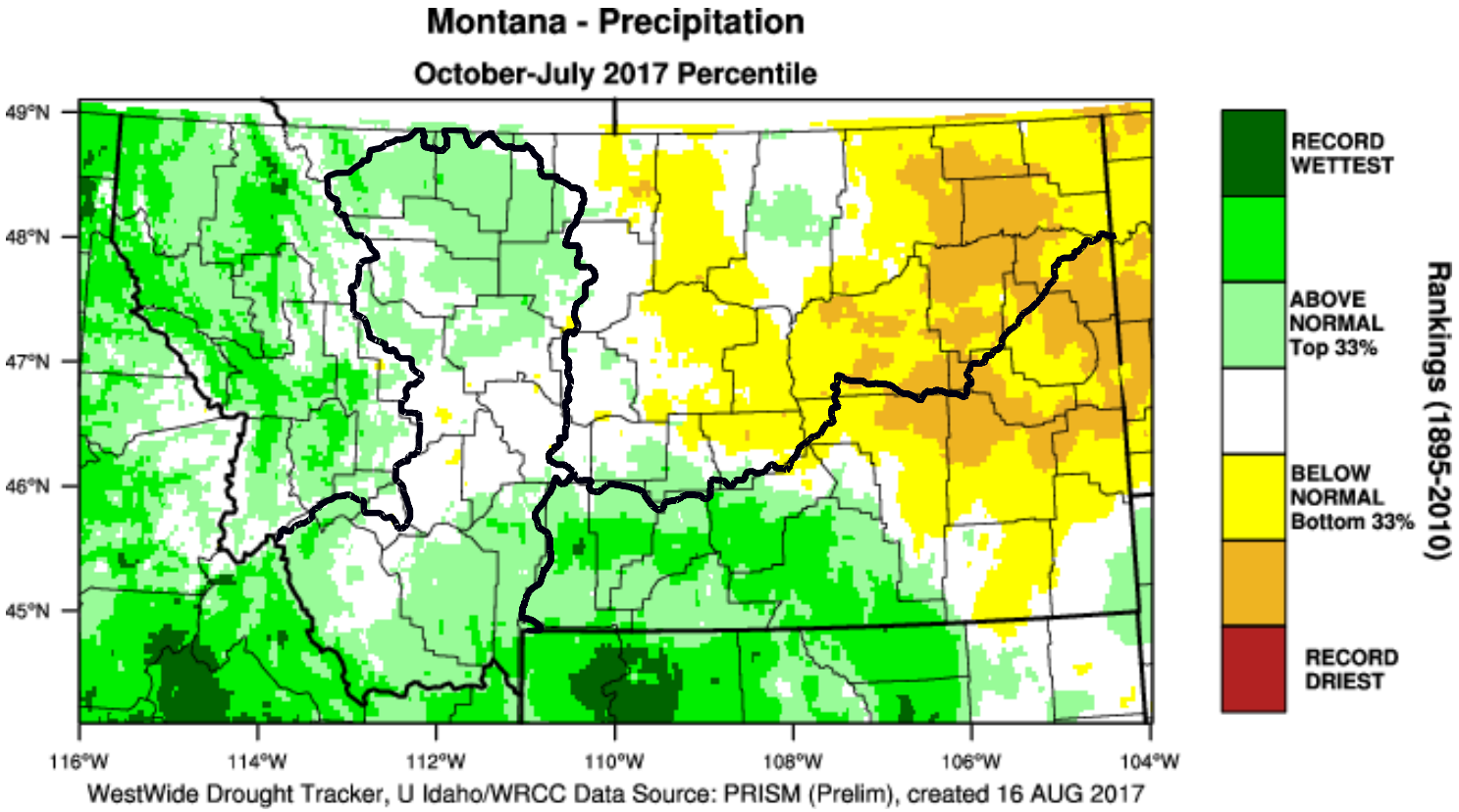
Water Year 2017 Precip Anomaly

% of Average Precipitation

0	50 - 70	150 - 170
1 - 10	70 - 90	170 - 200
11 - 20	90 - 110	200 - 300
20 - 30	110 - 130	300 - 400
30 - 50	130 - 150	> 400

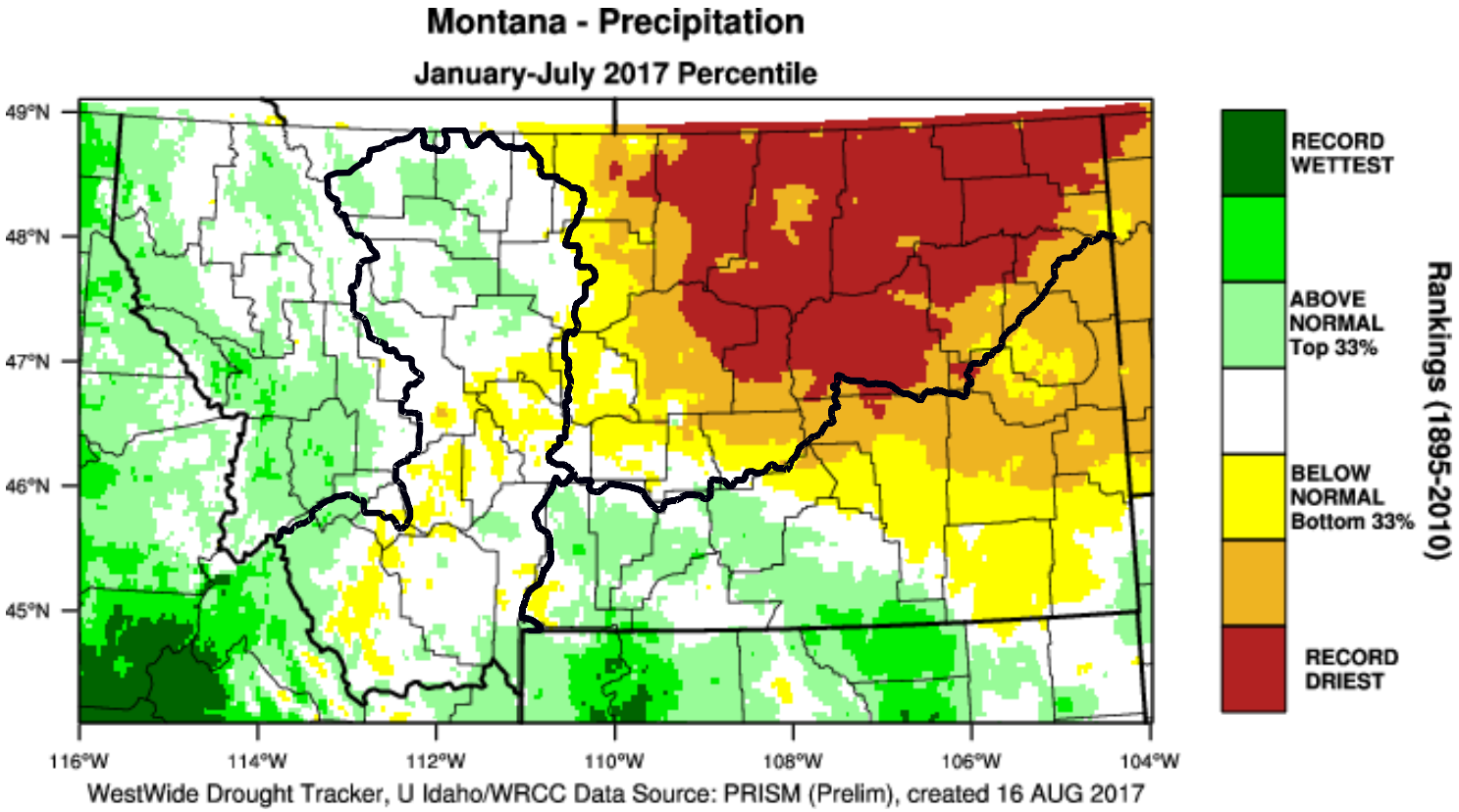
Precipitation Ranking

Water Year 2017

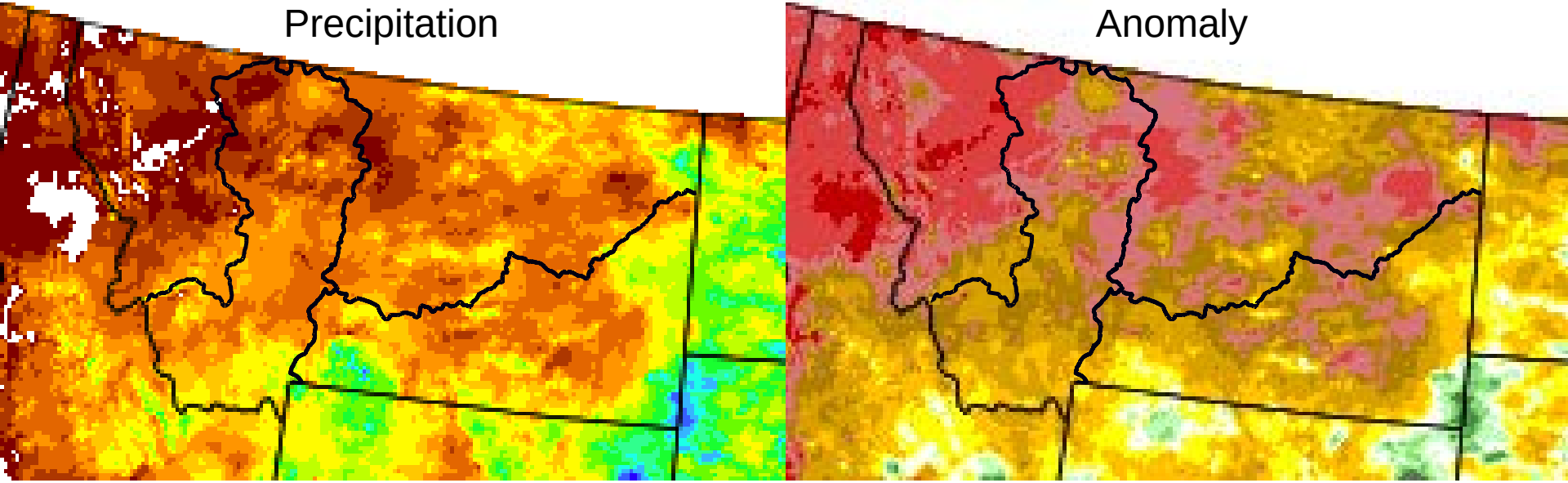


Precipitation Ranking

Calendar Year 2017



Jul 2017 Precip vs Anomaly



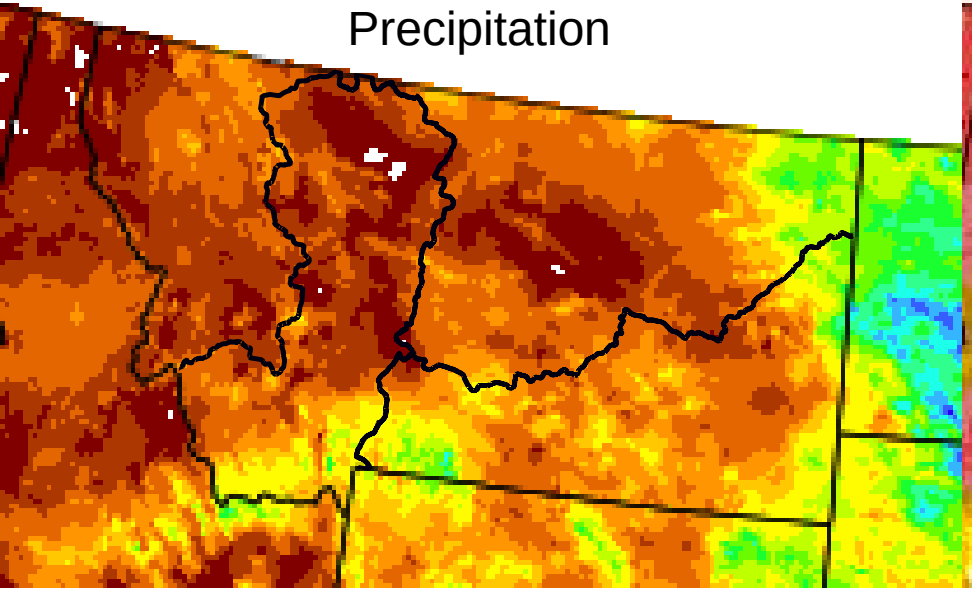
Monthly Precipitation (in.)

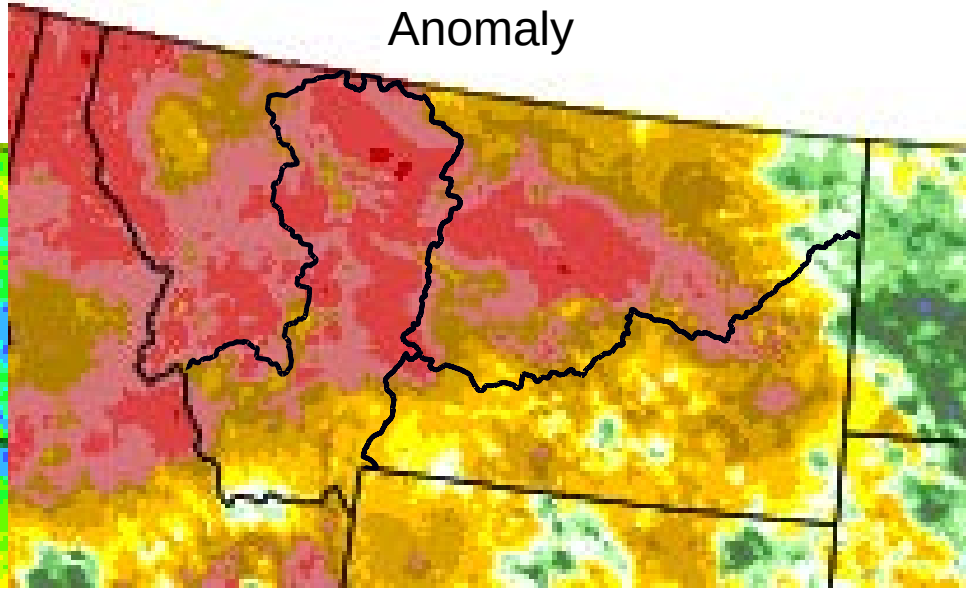
< 0.01	0.6 - 0.8	2.4 - 2.8	6 - 8
.01 - 0.1	0.8 - 1.2	2.8 - 3.2	8 - 12
0.1 - 0.2	1.2 - 1.6	3.2 - 4	12 - 16
0.2 - 0.4	1.6 - 2	4 - 5	16 - 20
0.4 - 0.6	2 - 2.4	5 - 6	> 20

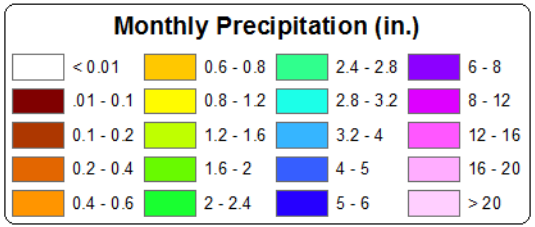
% of Average Precipitation

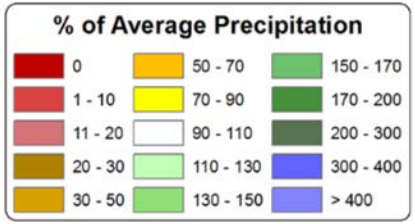
0	50 - 70	150 - 170
1 - 10	70 - 90	170 - 200
11 - 20	90 - 110	200 - 300
20 - 30	110 - 130	300 - 400
30 - 50	130 - 150	> 400

Aug Precip vs Anomaly – as of 8/28



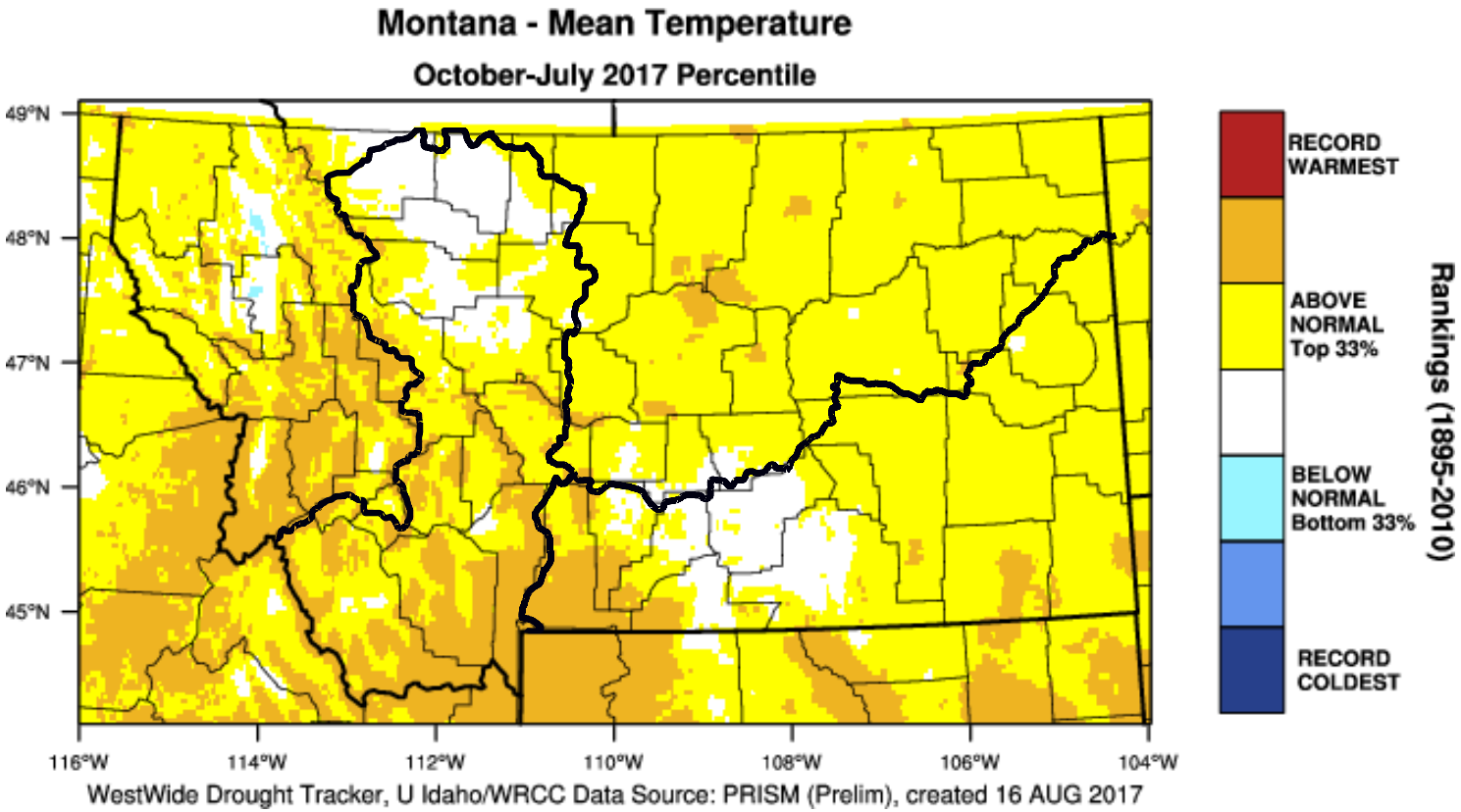






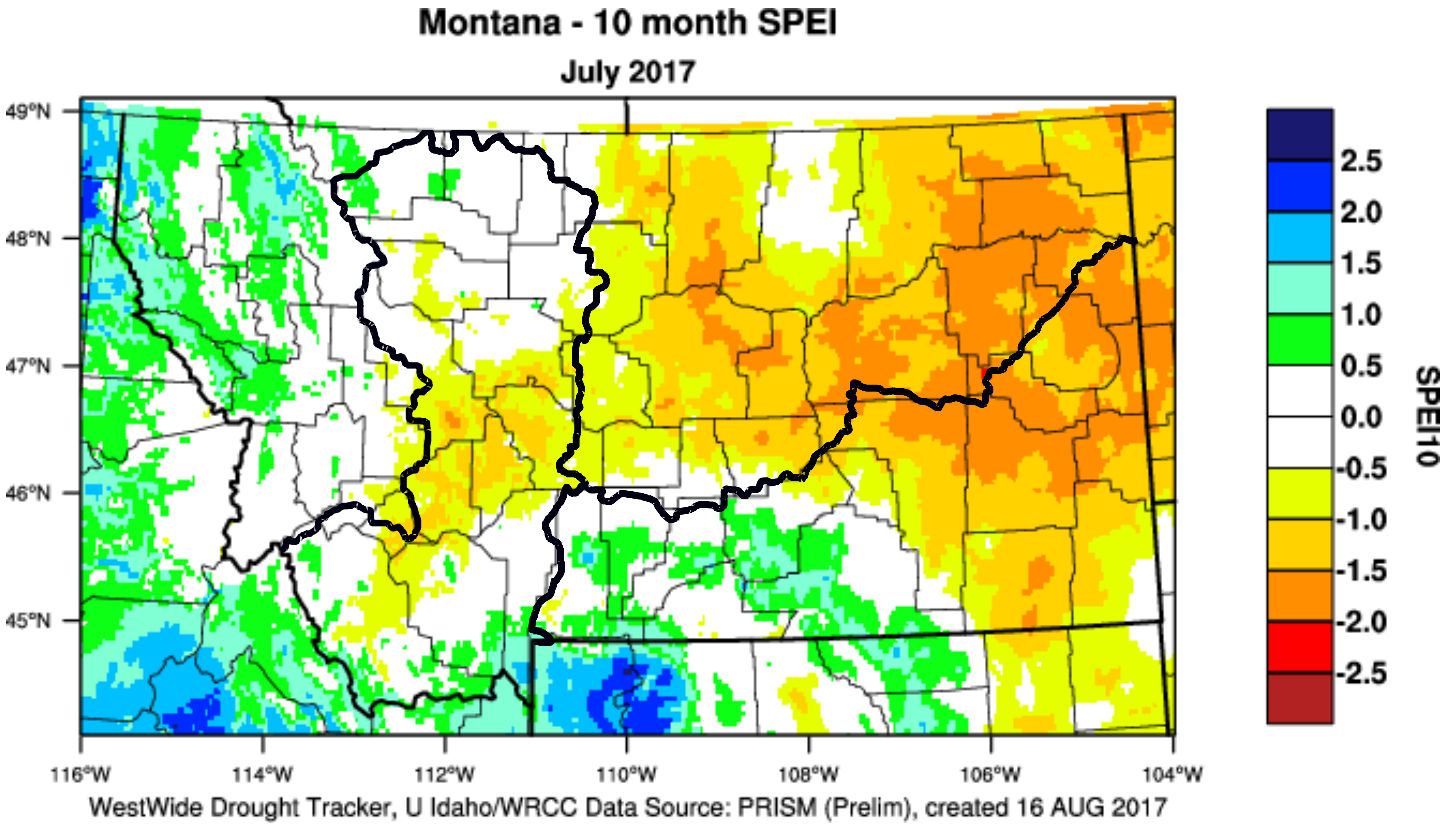
Mean Temperature Ranking

Water Year 2017



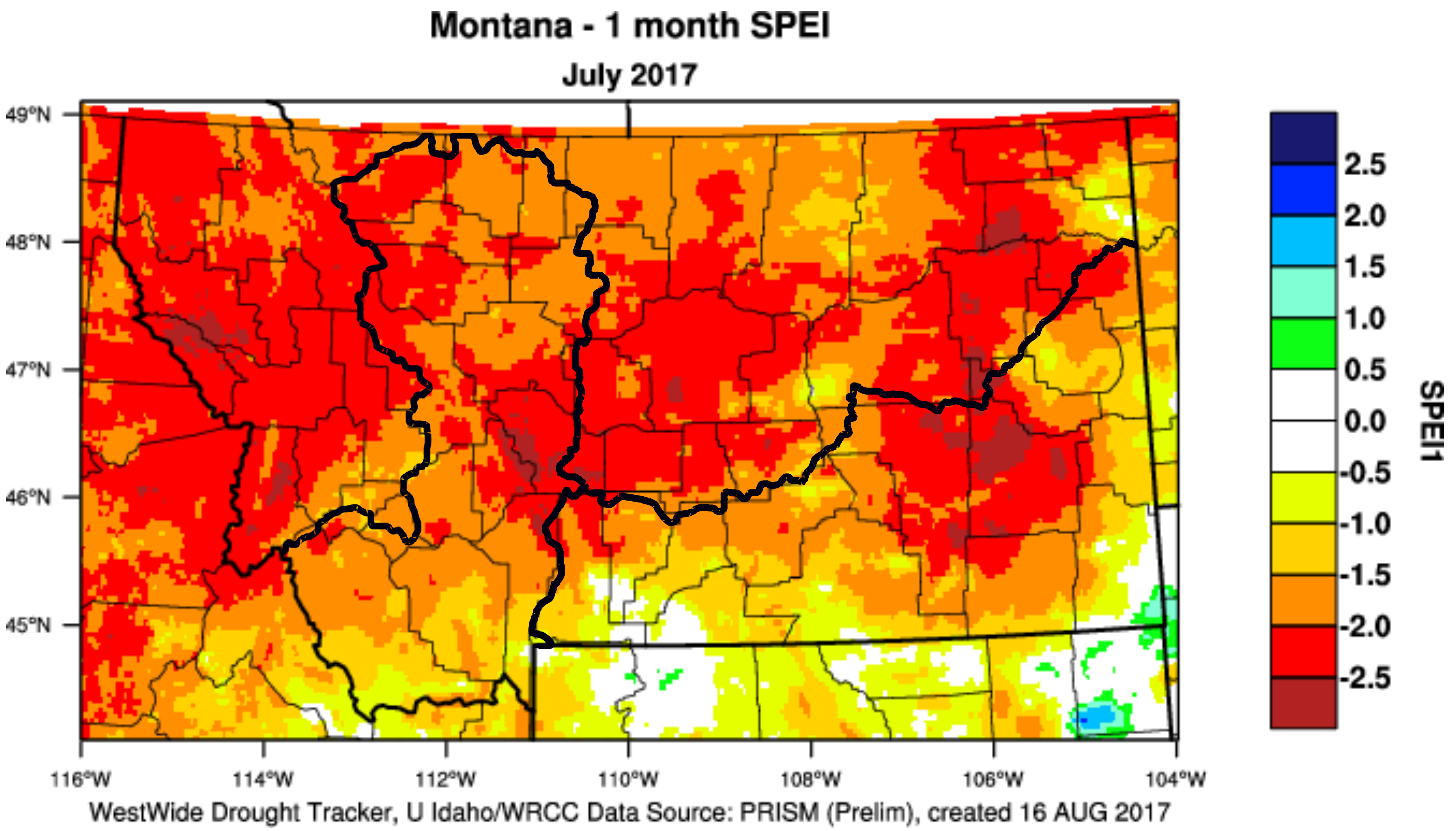
PRISM SPEI

Water Year 2017

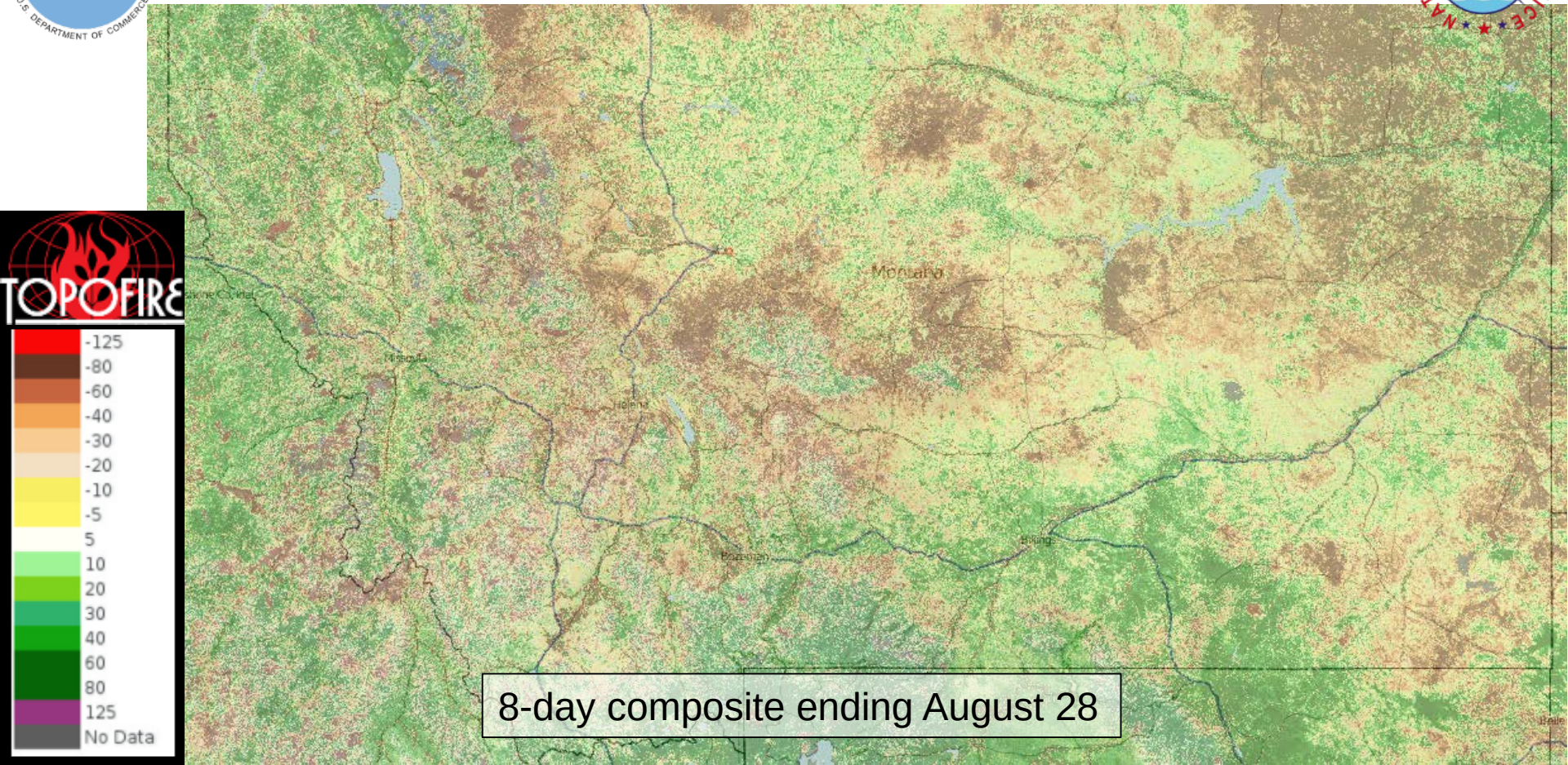


PRISM SPEI

July 2017

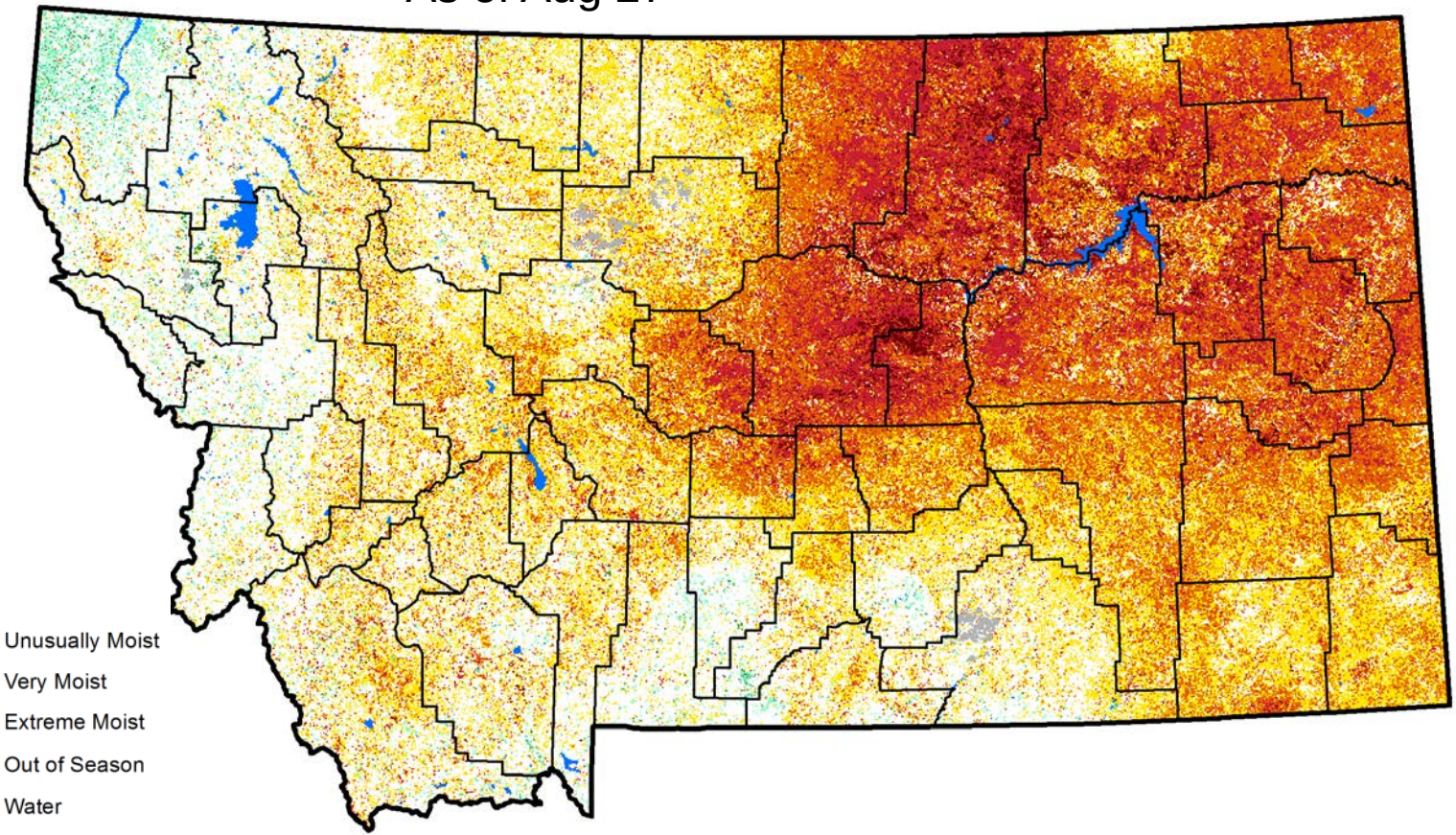


Normalized Difference Vegetation Index



Vegetation Drought Response Index

As of Aug 27

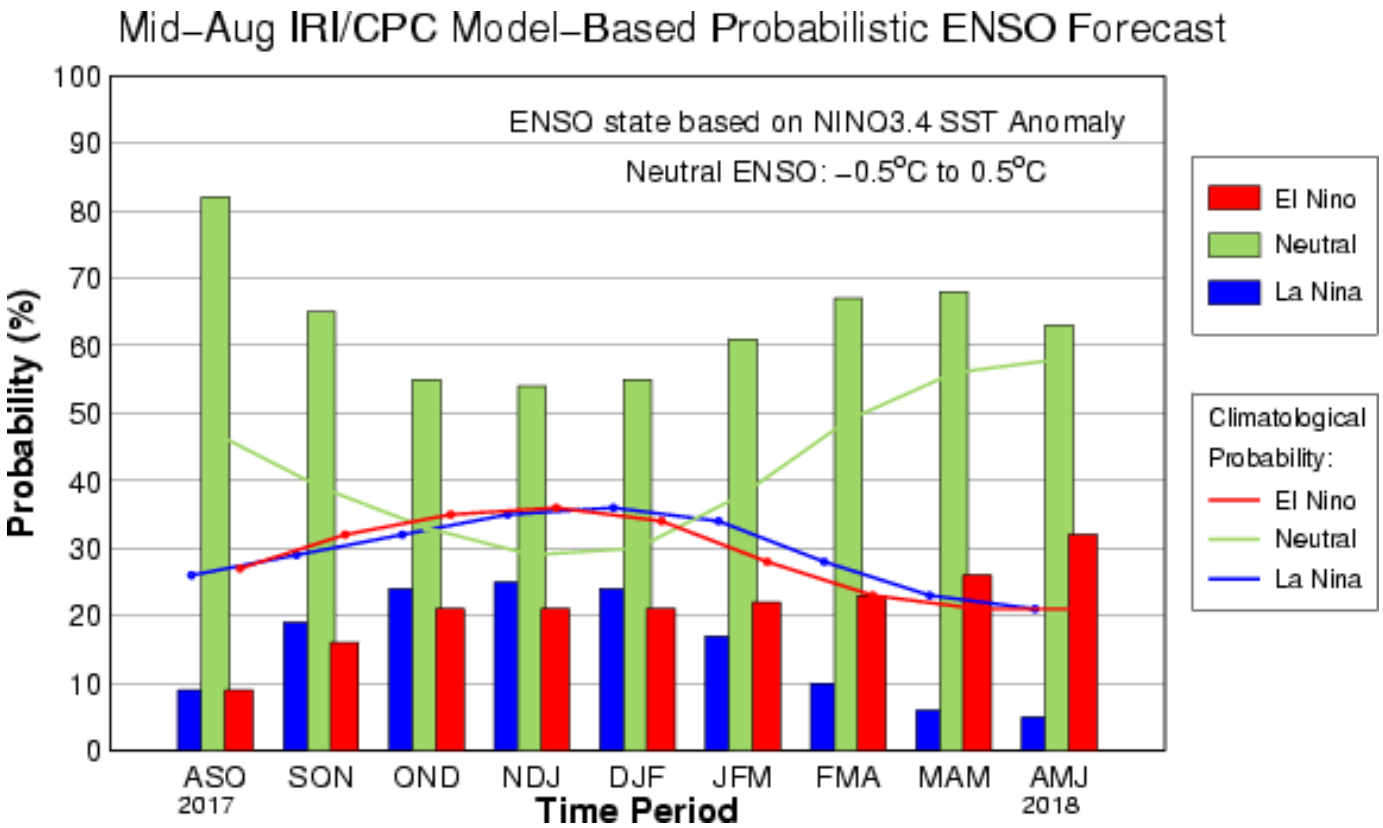


Vegetation Condition

- Extreme Drought
- Severe Drought
- Moderate Drought
- Pre-drought stress
- Near Normal
- Unusually Moist
- Very Moist
- Extreme Moist
- Out of Season
- Water

ENSO

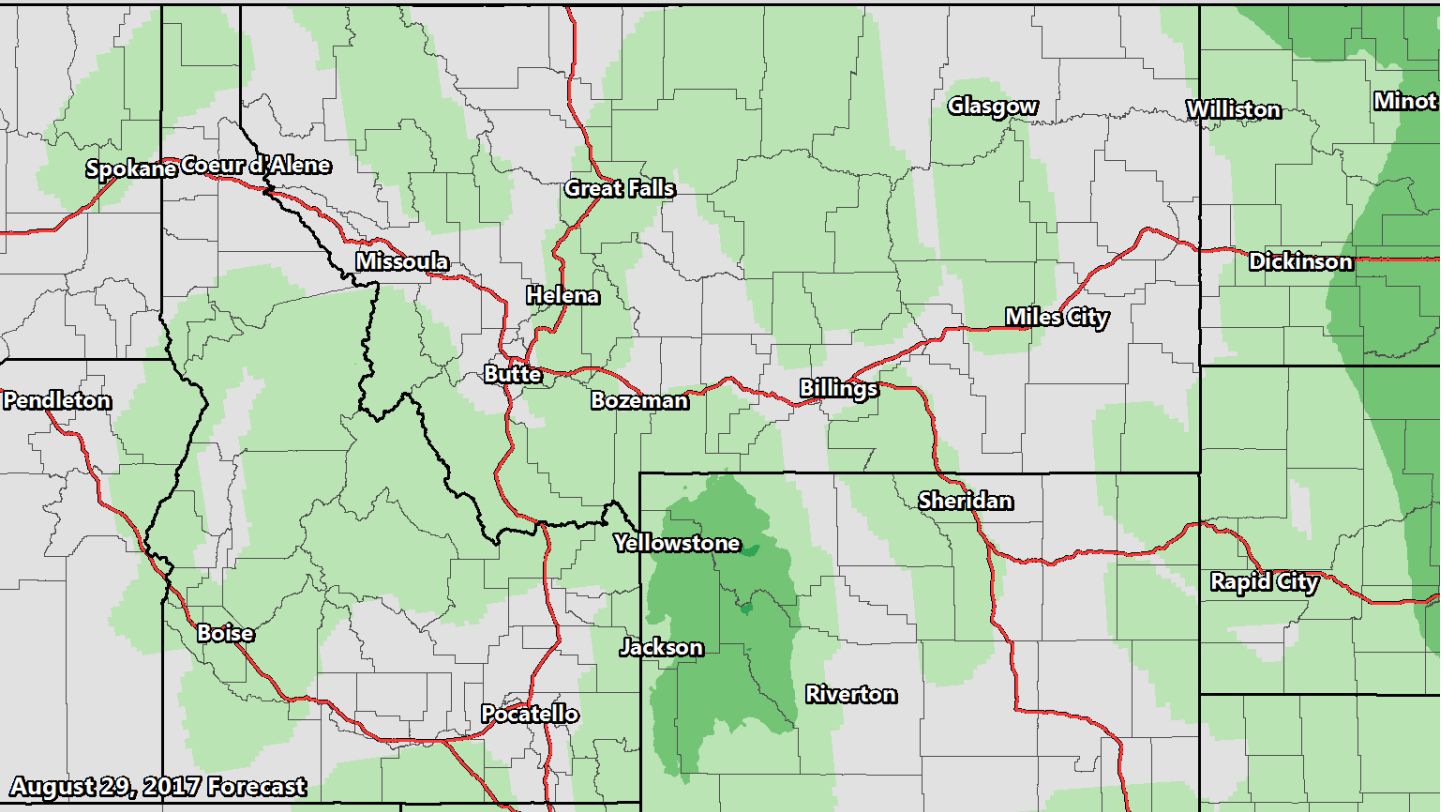
El Niño Neutral



7-Day Precipitation Forecast

Through 6AM 09/05/2017

(in) .01 .10 .25 .50 1 2 3 4 6 8 10 15

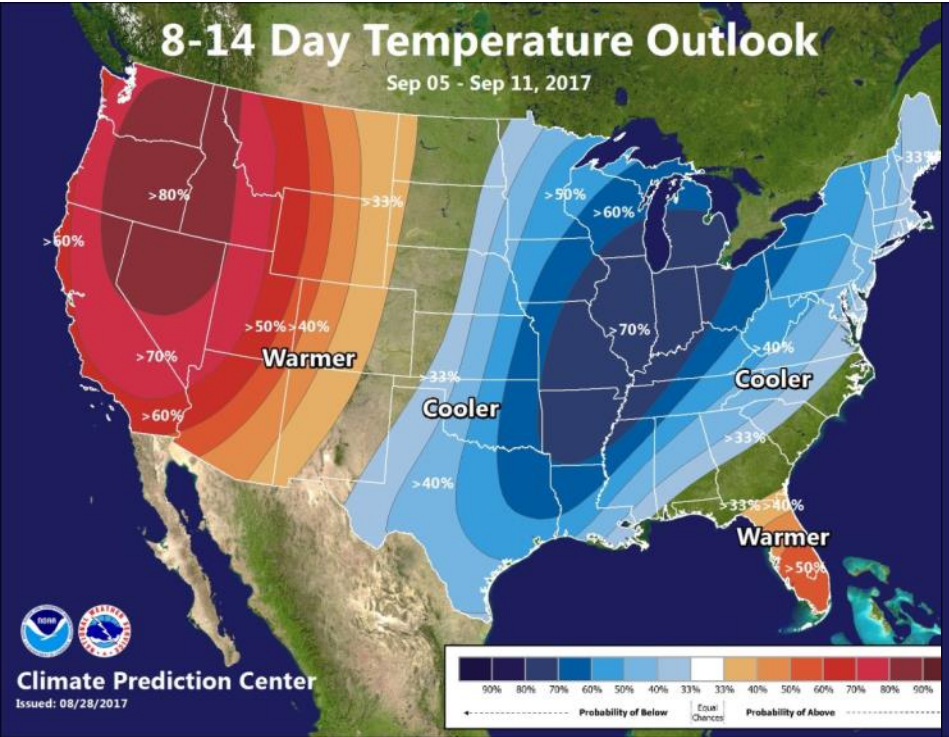


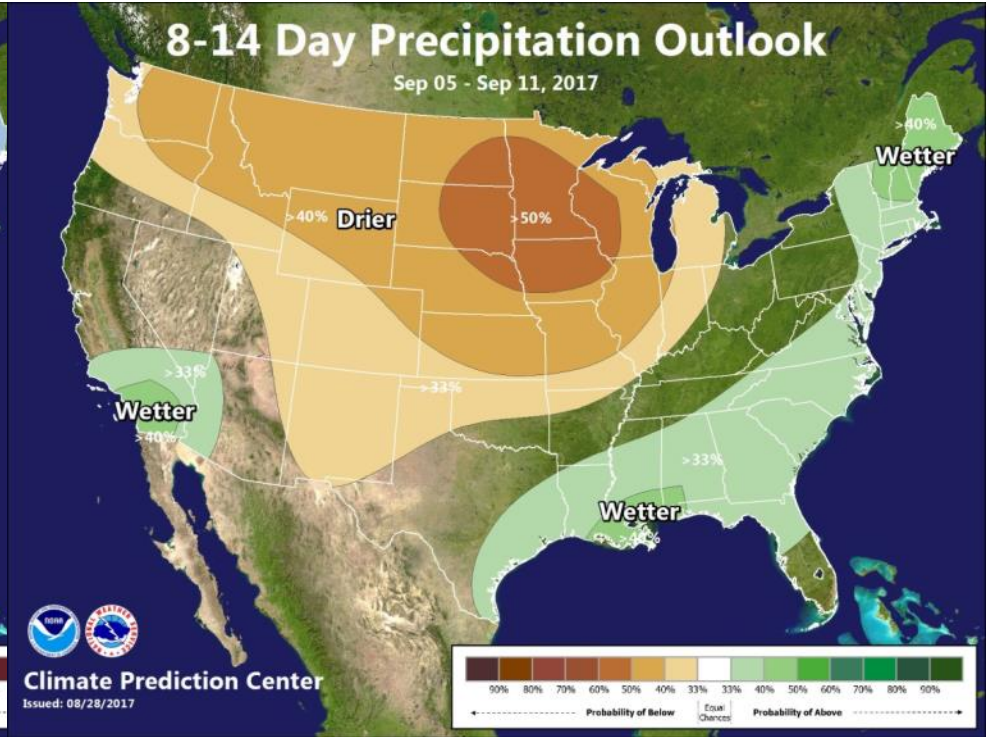
7 Day Precipitation Forecast

Created August 29

8-14 Day Outlook

Created August 28

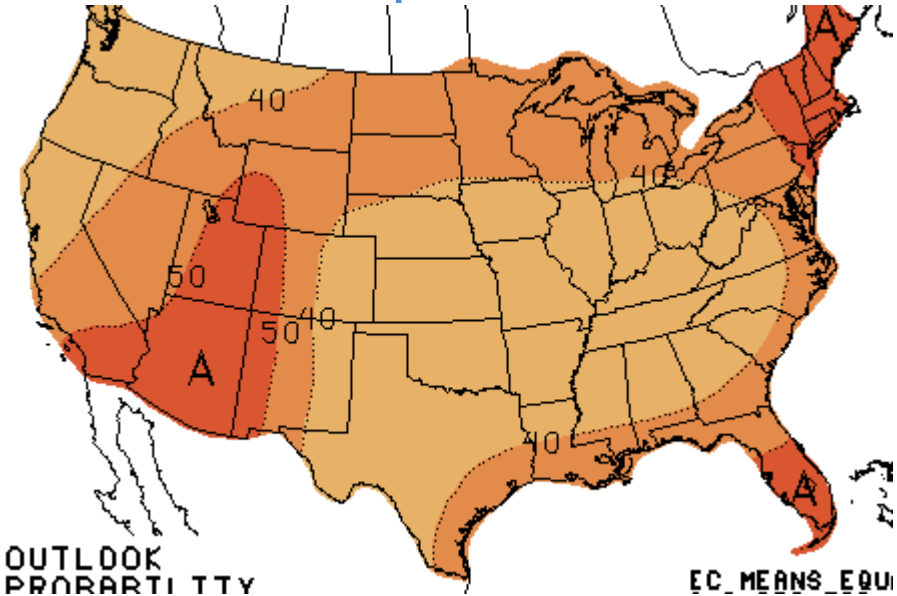




Sep-Nov Outlook

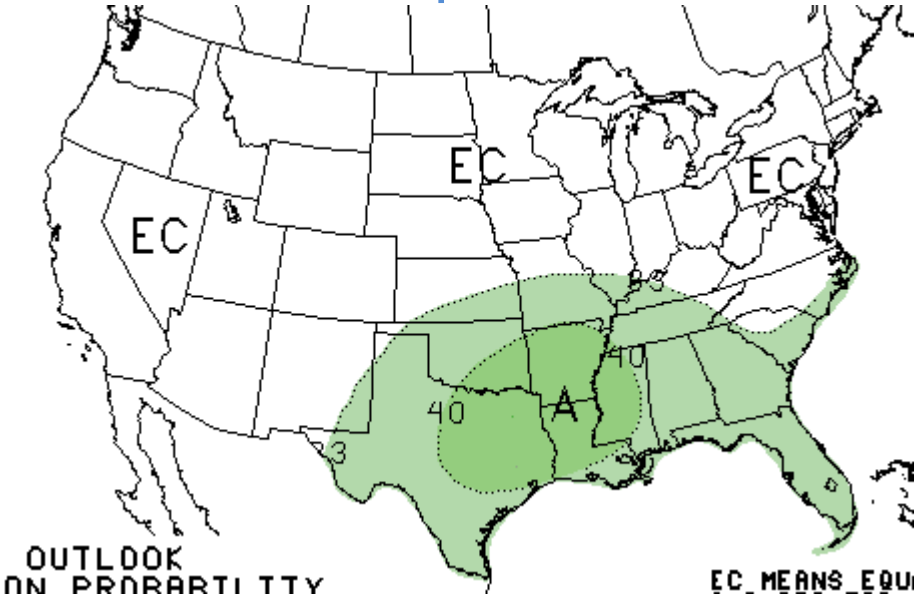
Created August 17

Temperature



33% to 40% chance of above normal temperatures across Montana

Precipitation

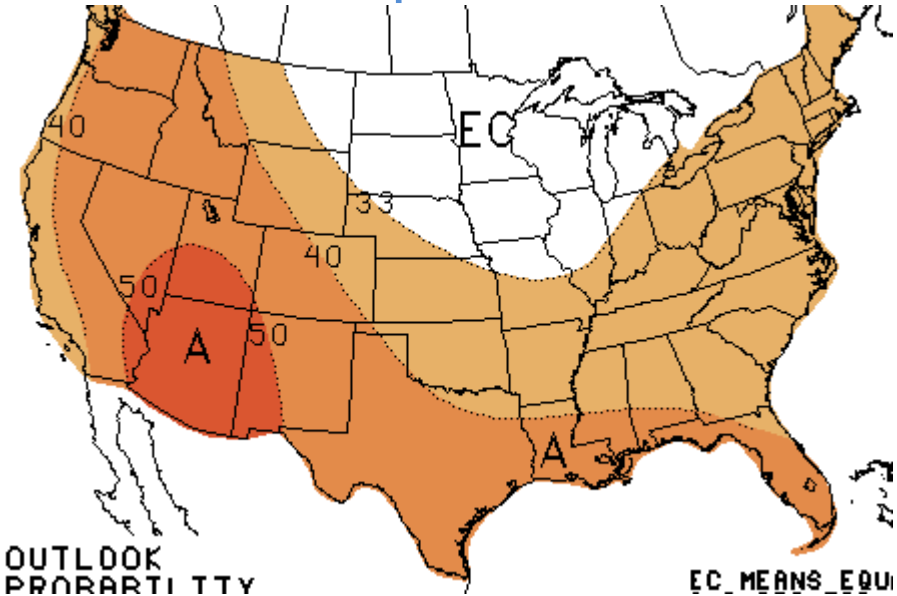


Equal chances of above or below precipitation across Montana

Dec-Feb Outlook

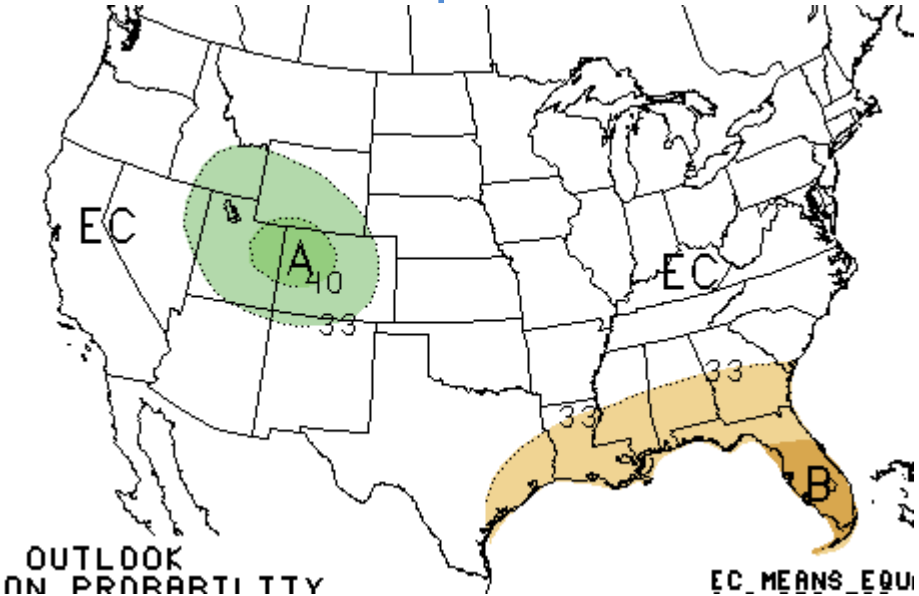
Created August 17

Temperature



40% chance of above normal temperatures western Montana, 33% central Montana, and equal chances of above or below normal temperatures NE MT

Precipitation

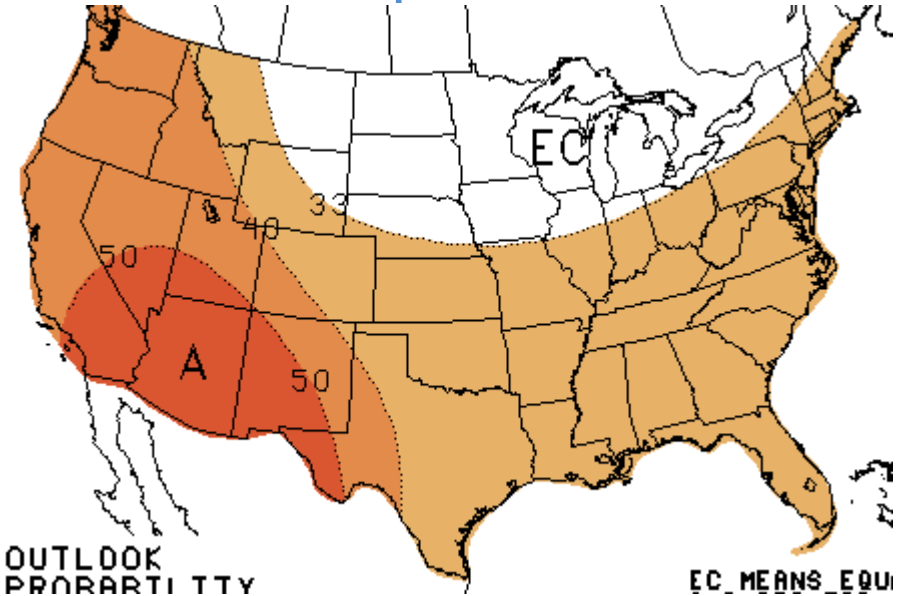


Equal chances of above or below normal precipitation across Montana

Mar-May Outlook

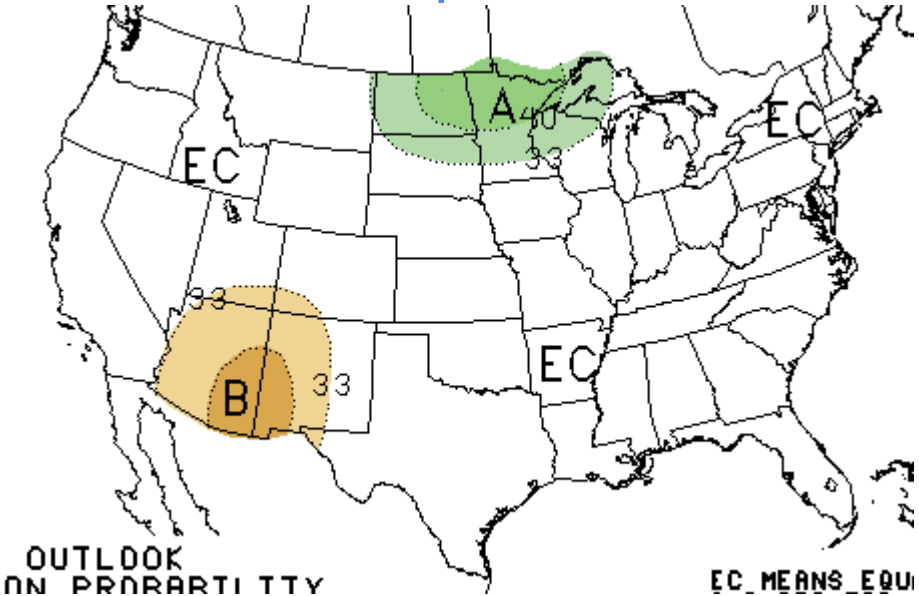
Created August 17

Temperature



33% chance of above normal temperatures western Montana, with equal chances of above or below normal temperatures across eastern Montana.

Precipitation

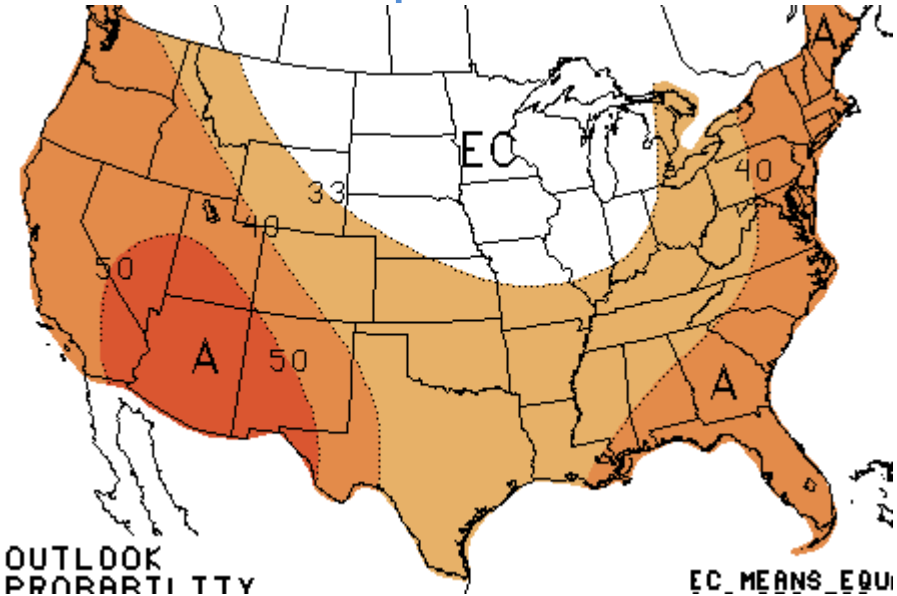


Equal chances of above or below normal precipitation statewide/

Jun-Aug Outlook

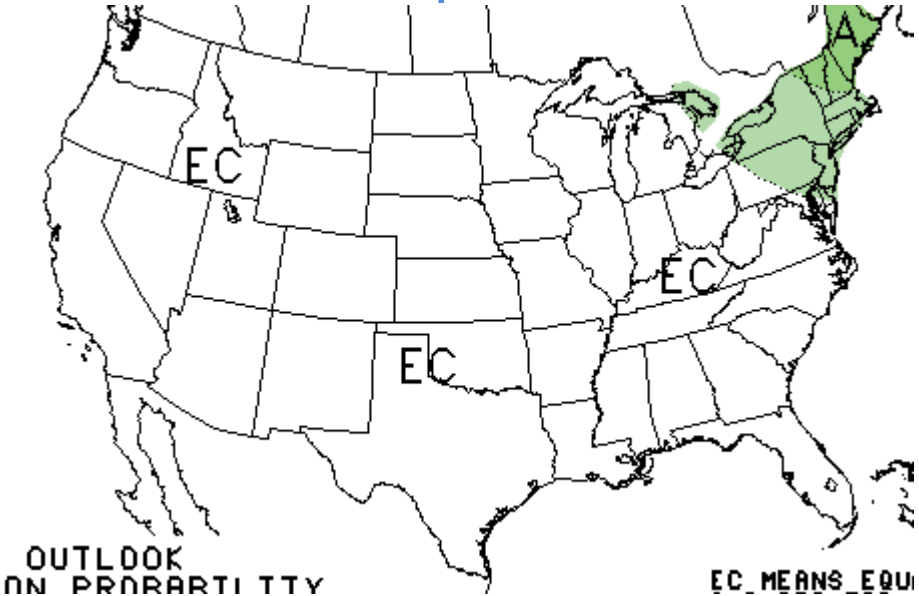
Created August 17

Temperature



Equal chances for above normal or below temperatures northeast Montana, 33% chance or greater over western half of Montana

Precipitation



Equal chances of above or below normal precipitation statewide

weather.gov

weather.gov/billings
weather.gov/glasgow
weather.gov/missoula
weather.gov/greatfalls

Weather-Ready Nation
National Oceanic and Atmospheric Administration