

Above normal significant wildland fire potential in the Northern Rockies Geographic Area (NRGA) develops over north Idaho in June and spreads eastward through western and north central Montana in July. Above normal significant wildland fire potential continues to spread eastward in August reaching all of Montana and the western part of North Dakota. Long range weather projections do not signal significant relief in late August or September so the September outlook will be unchanged from August. Yellowstone National Park and the eastern half of North Dakota will be the only areas with normal potential in August and September.

Significant Wildland Fire Potential

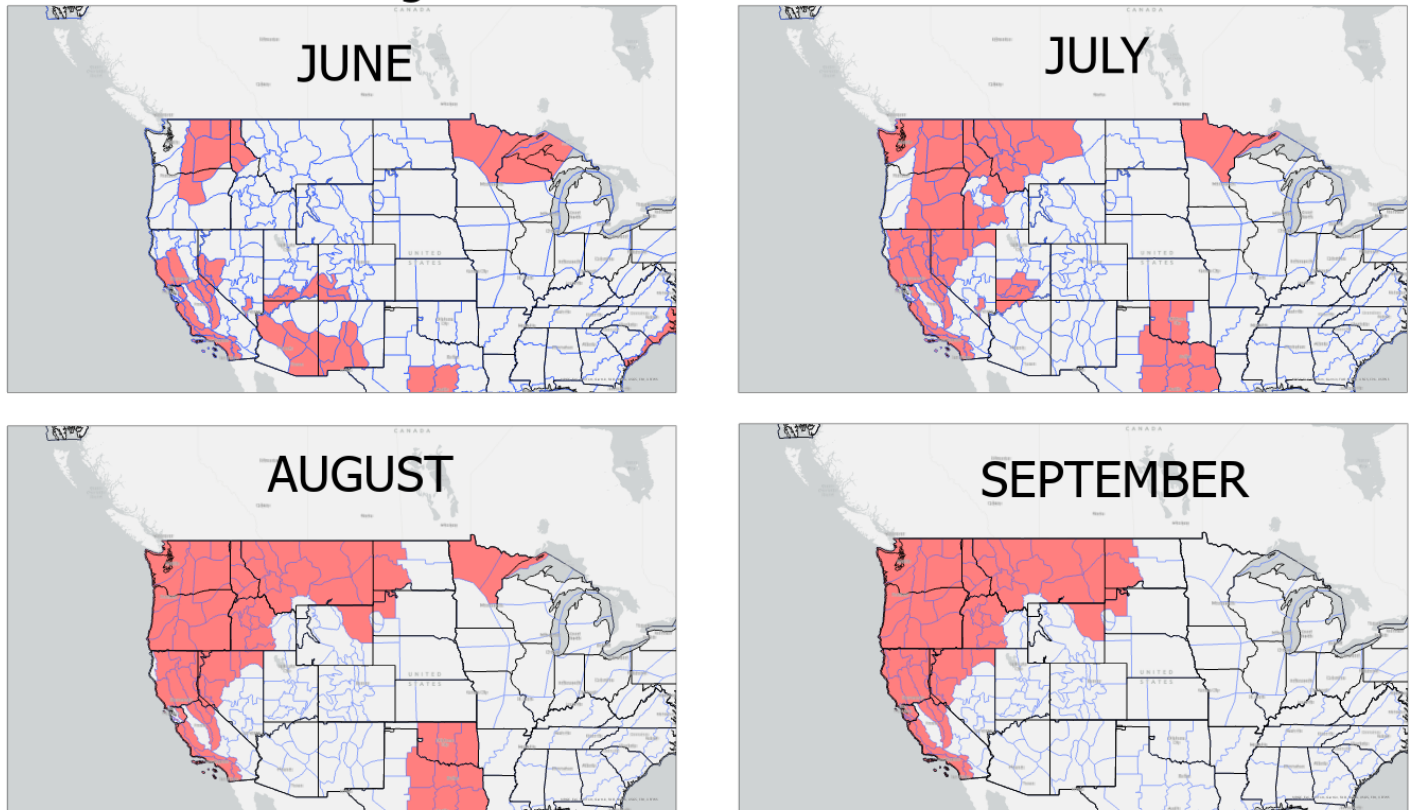
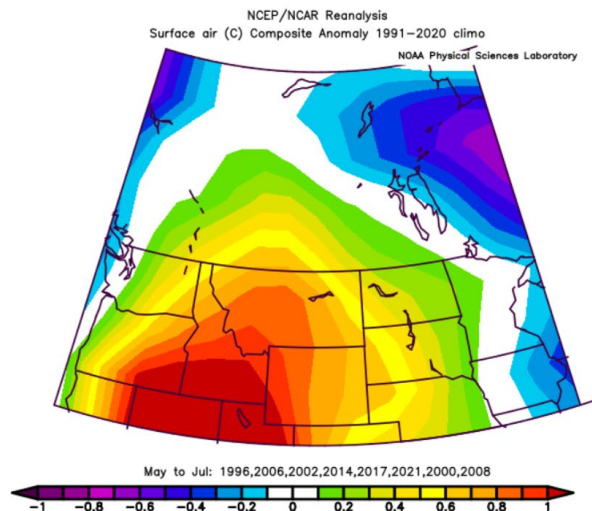


Figure 1 Significant wildland potential for the NRGAs showing above normal potential in Idaho in June spreading eastward across the NRGAs in July and August

Seasonal forecasts lean above normal for temperatures and below normal for moisture for most of the area in June, July and August. Areas of preexisting drought, particularly over the western end of the NRGAs, combined with the weather outlooks support above normal potential. Concern is heightened because pattern comparison with equatorial and ocean temperature patterns matches other years where significant fire activity has occurred in the NRGAs like 2006, 2017 and 2021.

Outlooks based on other years matching current global patterns

Temperature Reanalysis Outlook MJJ Strong warm signal western half NRG



Precipitation Reanalysis Outlook MJJ Strong dry signal western half NRG

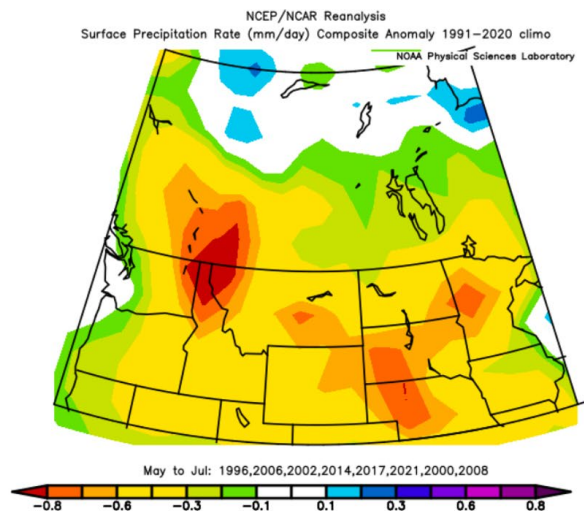


Figure 2 Reanalysis of years identified by NOAA forecasters as being nearest neighbors to current sea surface and equatorial temperatures. Results indicate strong chance for above normal warmth and dryness for the NRG especially western portions.

The first half of May had two short periods of much above normal high temperatures which supported windows of fire activity. After the second period of hot temperatures May 9 to 12, a wetter period occurred across a large portion of the NRG, especially impacting the western half of North Dakota. This moisture resulted in above normal precipitation during the month for western North Dakota and above normal moisture for the southern half of Montana and southeast North Dakota. It was drier west of the Continental Divide with well below normal moisture for north Idaho. Western Montana and northern Idaho had near normal temperatures in May with slightly above normal temperatures for areas east of the Continental Divide.

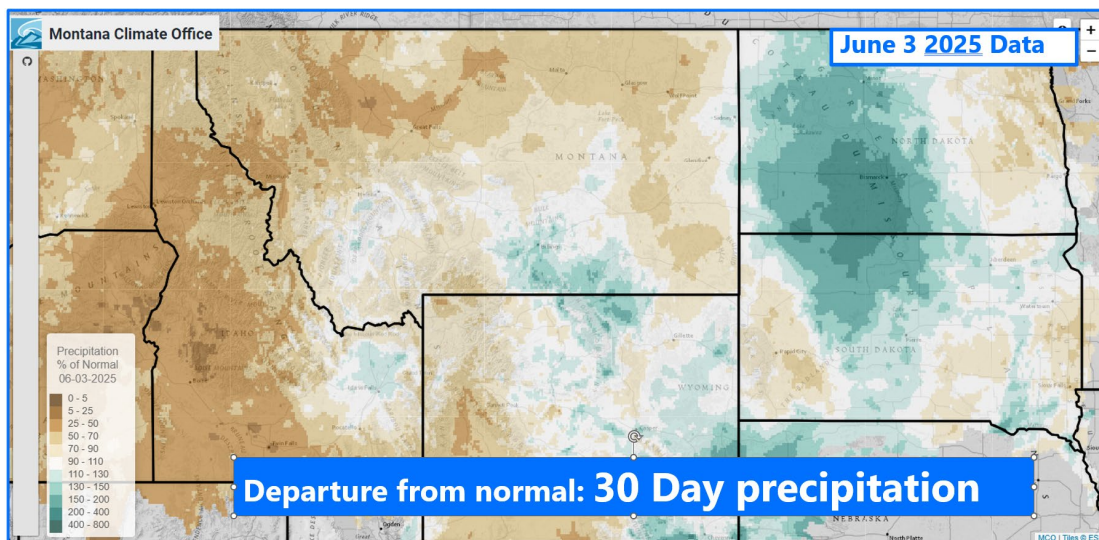


Figure 3 30 day precipitation anomaly showing most of the western NRG missing precipitation in May.

Snowpack ended up slightly below normal, which means longer term drought impacts like ground water deficits have not been mitigated. Drought monitoring showed 1 to 2 categories of drying over north central Montana and north Idaho with 1 to 2 category improvement over southeast Montana and western North Dakota. Moderate to severe drought is still observed over the NRGAs west of the Continental Divide and over parts of eastern Montana and western North Dakota.

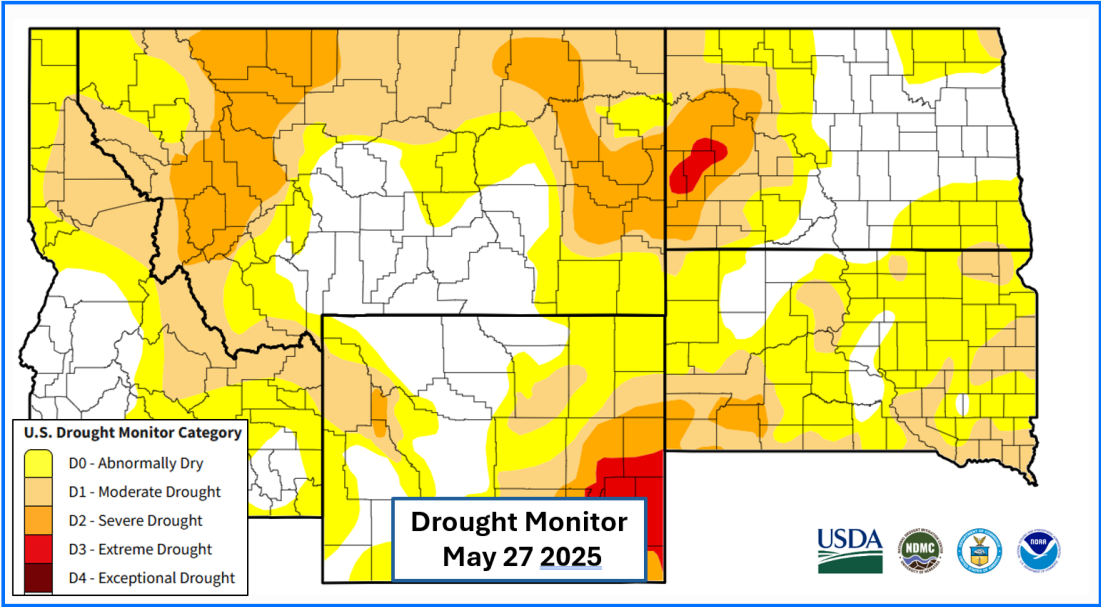


Figure 4 Drought Monitor on May 27 showing areas of severe drought. Montana has seen a 18 percent increase in severe drought coverage compared to 1 year ago.

Warm and dry conditions in April west of the Continental Divide led to dry dead and downed forest fuels by early May. This dryness occurred before spring grasses and herbs became lush with moisture. As a result, early season wildfires faced containment challenges in areas where snow had just melted. In June, much of the NRGAs, except eastern North Dakota and south-central Montana, will experience drought. Higher temperatures and below-normal precipitation will dry out dead and downed fuels quickly, increasing fire spread risks. While live fuels will initially help slow fire spread, they will lose moisture as the season progresses. Areas which have received above normal spring moisture face a risk of higher grass fuel loading but this fuel matrix contribution will be delayed until late July when drying pushes grasses towards dormancy.

6 large fires (>100ac) were reported in May with 3 of the fires exceeding 1000ac. The Sawlog fire in southwest Montana was the longest duration fire persisting for 2 weeks. The first half of May featured windows for prescribed fire. Live fuel growth the latter half of the month brought a strong reduction in activity.

[illegible]

Figure 6 Precipitation outlook for July through September which leans below normal for the NRG.