

**Valid for:** July 27- Aug 9

**Date/Time Issued:** 7/26/2023 @ 1700 MDT

**Next Update:** Aug 2023

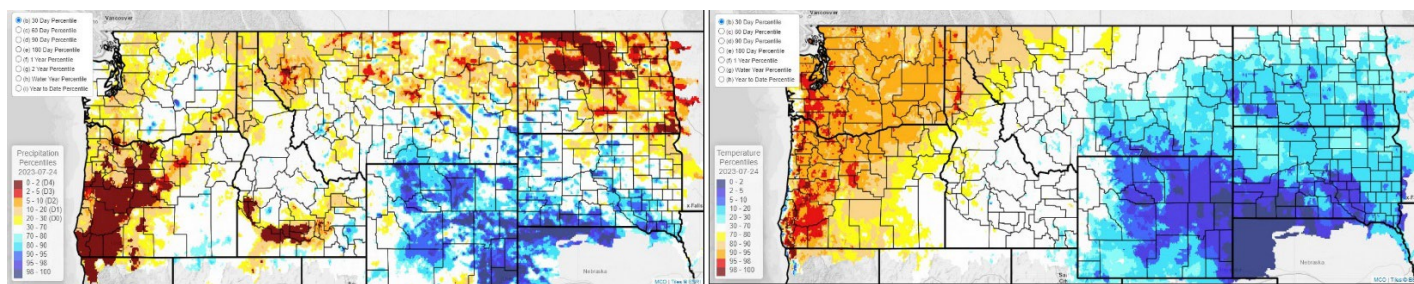
**Signed:** *Erin Noonan-Wright*, Long-term Fire Behavior Analyst

**Objective:**

This is a bi-monthly forecast to help understand short to mid-term conditions affecting fire behavior in the Northern Rockies.

**Narrative:**

- Over the course of 10 days (since the last forecast) precipitation percentiles have trended drier, toward normal for the southern portion of the Northern Rockies Geographic Area (NRGA). The northern portion of the NRGA continues to dry out as rain is either sporadic or non-existent (Fig 1).
- Similarly, as of July 24<sup>th</sup>, a 30-day running mean of daily maximum temperatures show northern Idaho and northwest Montana with lower percentiles influencing the deepening drought (Fig 2).



*Figs 1 & 2. University of Montana Drought Dashboard 30-Day Precipitation Percentile maps and Daily Maximum Temperature 30-day percentile with state and county jurisdictions.*

**Weather (Short-term) – Late July**

Please refer to the [National Weather Service forecasts and warnings](#) for details for specific areas throughout the GACC.

The NRGA is entering a period of normal July temperatures with higher relative humidities than what was experienced last week. The heat returns for the weekend (7/29-30) with the building of a ridge of high pressure. However, this ridge is less strong than last weekend and temperatures will be slightly above normal. There will be enough moisture to facilitate good night-time RH recovery, which should help temper fire behavior. Breezy conditions will persist throughout the week. The breakdown of this weak upper ridge by the beginning/middle of next week will be accompanied by higher wind speeds and possibly dry/wet lightning.

**Extended Forecast:**

**Early August (August 1 - 8)**

- **Hot with a chance of wet thunderstorm activity mostly east of the continental divide.**

The 6 - 10 Day forecast for both [temperature](#) and [precipitation](#) follow similar patterns as the 8-14 forecast below. Monsoon moisture will influence the development of thunderstorms mostly likely to occur east of the continental divide, some of these producing sporadic rain. While less likely, there is also a possibility of wet thunderstorm activity west of the continental divide. All PSAs are predicted to have higher than normal temperatures (Fig 3 & 4).

Refer to the NRGA [weather briefing](#), updated daily, for more information.

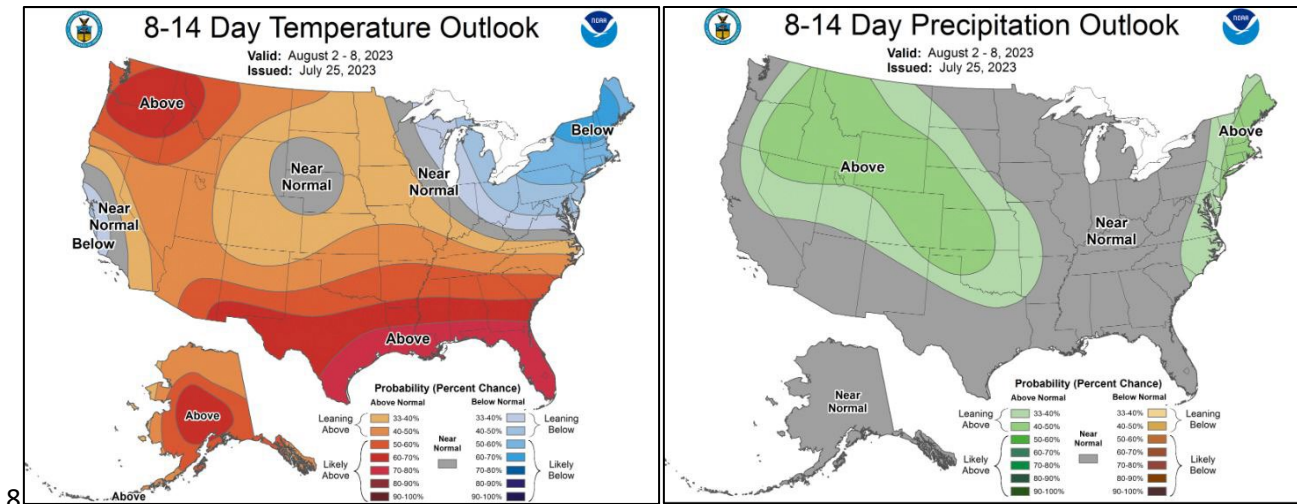


Fig 3 & 4. 8-14 Day [Temperature](#) and [Precipitation](#) Forecasts

\*\*Check the links for the most up to date information. These products will change as forecasts update.

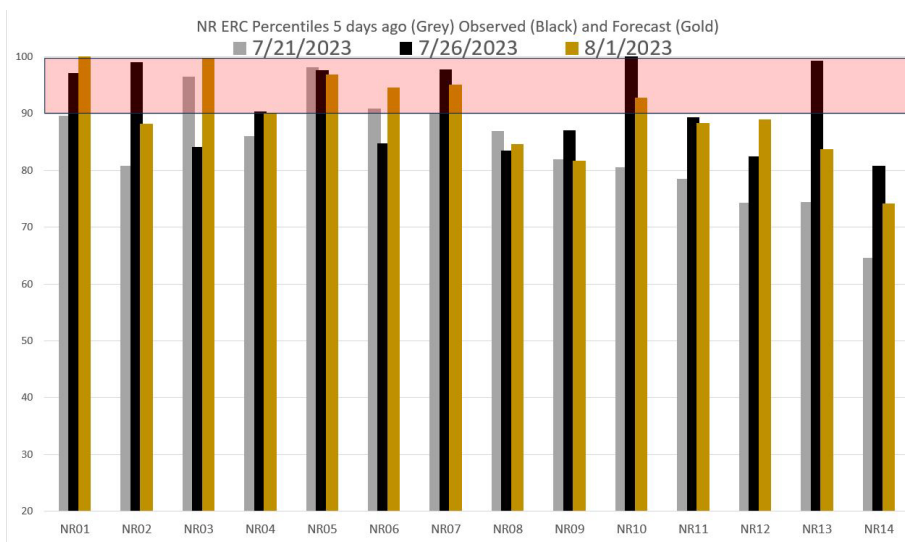


Fig 5. Energy Release Component (ERC) percentiles by Predictive Service Areas (PSA) within the NRGAs representing 5 days before today (7/26) and 6 days into the future (8/1). The area between the 90<sup>th</sup> and 100<sup>th</sup> percentile is highlighted as red to focus attention on PSAs predicted to be within this zone of higher fire danger.

See Fuels/Fire Danger: [ERC](#), [BI](#), [1000-hr](#), [100-hr](#) Graphs by PSA to see current trends for the NRGAs PSAs.

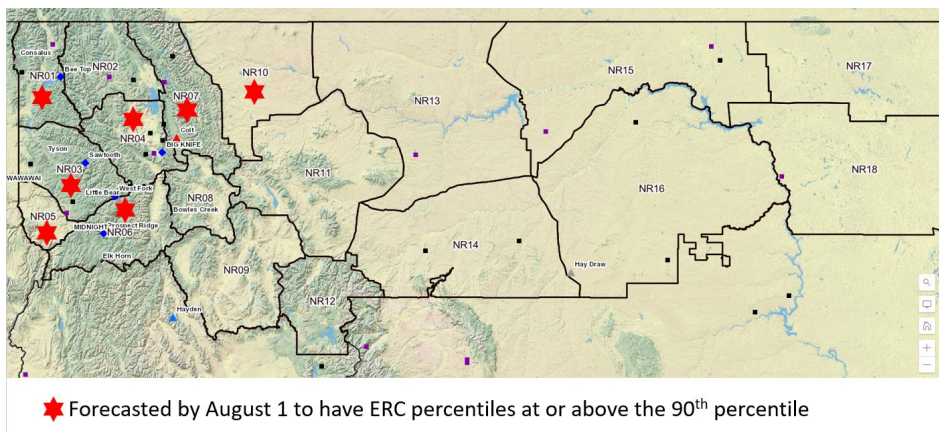


Fig 6. The NRGAs map of PSAs highlighting where ERCs are predicted to be at or above the 90<sup>th</sup> percentile by August 1. Please contact the NRCC Predictive Services Group at 329-4880 to provide us feedback on the accuracy of these forecasts.

## Northern Rockies Summary

### State of the Fuels:

- Many of the Northern Rockies Geographic Area (NRGA) fires are burning in heavy dead and down fuels that are the primary carrier of fire as of late July. 1000-hr fuel samples around the NRGA are ranging from 8 to 14%.
- Northern Idaho, central Idaho and northwest Montana are predicted to have ERC percentiles at or above the 90<sup>th</sup> percentile by August 1 (Fig 5 & 6).
- Fine, dead fuels (1-hr, 10-hr) will respond favorably to increases in forecasted Relative Humidity (RH) and possibly spotty precipitation that is forecasted in the 6-10 day and 8-14 day Climate Prediction Center forecasts (Fig. 3 & 4).
- Live fuels are continuing to cure but are still generally green where most of the wildfires are currently burning. Grass and shrub fuels in northcentral and eastern Montana will support large fire growth with wind (i.e. Hay Draw fire). In general, live fuels are continuing to hamper fire spread.
- North Dakota/Eastern Montana is still green with higher live fuel moistures, in part, due to moderate temperatures the last 30 days.
- The [Drought Monitor](#) (Fig. 8) indicates that drought continues to intensify in northern Idaho and northwest Montana. Northern Montana and eastern North Dakota are exhibiting abnormally dry to moderate drought due to the less than normal precipitation occurring in that area (Fig 1). Southern Montana and southern North Dakota have improved by 1-2 classes, leaving only a small area of drought in Yellowstone NP.
- Current fires burning in the NRGA are mostly surface fire and sometimes passive crown fire accompanied by higher wind speeds and poor RH recovery at night. Extreme fire behavior has not been observed and is not expected without more continual drying of fuels and significant wind events.
- The combination of low moisture, a growing season 2 weeks ahead of schedule, and very hot temperatures in late July have accelerated herbaceous curing rates, most noteworthy in the Southern Idaho Panhandle (NR-3), Camas Prairie (NR-5), and North Central Idaho/Bitterroot/Sapphire Mountain (NR-6). These are the areas to watch for increased fire behavior as live fuels cure and become available to the fuel complex.

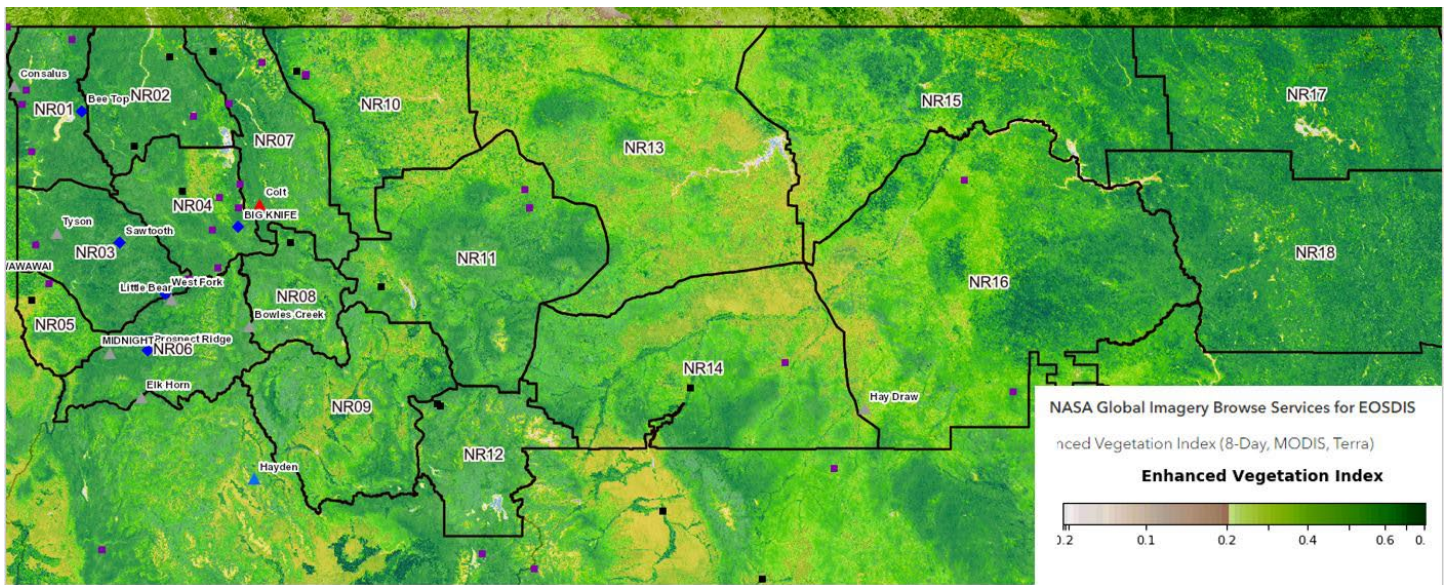
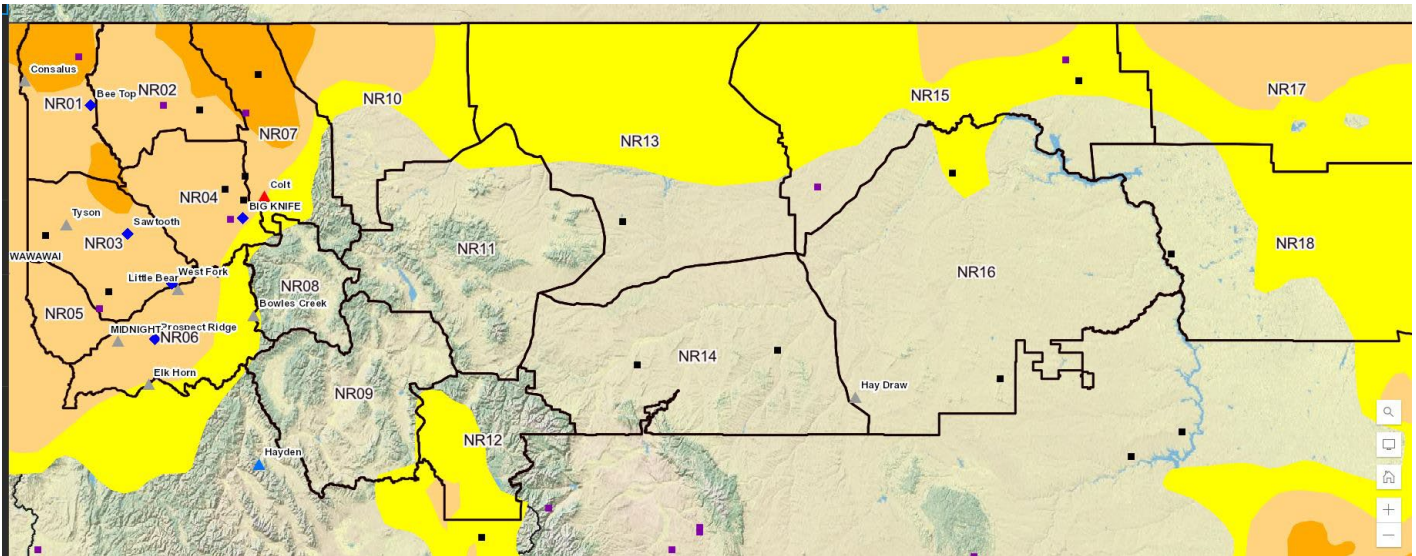


Fig 7. The 8-day *Enhanced Vegetation Index* showing the amount of vegetation from MODIS/TERRA satellites for the western and eastern portion of the NRGA. PSAs and significant fires as of July 26 are shown.



### Intensity and Impacts



Fig 8. *Current Drought Monitor* valid for July 18, 2023 within the NRGAs. PSAs and significant incidents shown as of July 26, 2023.

For the most current information on fires in the Northern Rockies or the Nation, visit the [InciWeb](https://www.firms.gov/) site or the [FIRMS Active Fire Mapping](https://www.firms.gov/) Program site.

**For the most recent National Significant Wildland Fire Potential Outlook:**

[https://www.nifc.gov/sites/default/files/document-media/monthly\\_seasonal\\_outlook.pdf](https://www.nifc.gov/sites/default/files/document-media/monthly_seasonal_outlook.pdf)