Texas Fire Potential Update
July 22nd-July 28th, 2019
Predictive Services Department
The state observed increased initial attack activity last week. Lightning and thunderstorm outflow winds produces several fires in the Trans Pecos region. The Hill Country also observed several fires with low to moderate resistance to control.
Fire Potential Notes

- Initial attack potential will be moderate this week in transition or cured herbaceous fuel beds and available brush/timber litter fuels.
- Monday and Tuesday’s cold front will produce short duration, scattered precipitation and a post-frontal environment for Wednesday and Thursday with cooler temperatures and drier air.
- Drying potential will be high from the midweek post-frontal environment and warming trend by the weekend. Rainfall coverage and duration will be limited.
- High temperatures and surface moisture will increase by the weekend as southerly flow returns.
The 14 day rainfall map is becoming stale as many portions of the state have seen little rainfall in past 10 days.

Both locations of the Stone and Oglesby fire from the weekend have received little to no rainfall in the past 14 days.
Monday and Tuesday Rainfall

- Monday and Tuesday’s cold front may produce scattered rainfall with the best chances in South Texas.
- Observed rainfall amounts will be of short duration.
Pockets of 25% or less of normal rainfall continue to emerge in parts of the Rolling Plains, Hill Country, and South Texas. Monday and Tuesday’s potential rainfall will not be enough to erase these deficits.

The 30-day percent of normal rainfall provides good guidance during the growing season where there is often increase of initial attack fires in areas of 25% or less of normal rainfall.
Above normal rainfall during the spring has produced normal to above normal grass loading in the Hill Country and Rolling Plains. The combination of little rainfall over the past 14-days with last week’s sustained 95-100° temperatures produced cured herbaceous fuels of the Oglesby Fire.

The primary carrier of the Oglesby Fire was the cured herbaceous fuels (Left). Some isolated and group torching in juniper and mesquite was observed. The Barnhart RAWS observed sustained SSE winds of 10-12 mph with RH values below 25% on Saturday and Sunday.
Above Normal: 3 PSA / Near Normal: 5 PSA / Below Normal: 6 PSA

Last week’s hot temperatures and limited rainfall increased ERC values statewide. South Texas, Southern Plains, and Trans Pecos are above normal. Rainfall Monday and Tuesday may pause or decrease ERC values in these PSAs.

The post-frontal environment by midweek will still provide warm temperatures, lower relative humidity values, and limited rainfall allowing ERC values to increase for all other PSAs. Several PSAs will likely go above normal by the weekend.
Over the last 7 days, limited rainfall and hot temperatures has increased the coverage of observed 100 hour fuel moisture at or below the 25\textsuperscript{th} percentile.

For areas that miss the rainfall, availability of brush and timber litter fuels will remain and likely increase with the post frontal air mass and lower relative humidity values later in the week.
Tuesday’s post frontal conditions may increase initial attack potential for the northern half of the state due to the highest wind speeds and drier air moving over available brush and timber litter fuels. Winds will be strongest on Tuesday.
Post Frontal Conditions Wednesday and Thursday

The northeast flow will produce fair to poor overnight relative humidity recoveries Wednesday and Thursday. Daytime RH values will be lower than last week, producing high drying potential in surface fuel beds. By Friday, southerly flow will return increasing surface moisture and high temperatures for the weekend.