Texas Fire Potential Update

May 17th –May 22nd, 2024

Texas A&M Forest Service Predictive Services

Fire Potential Notes May 17th- May 22nd, 2024

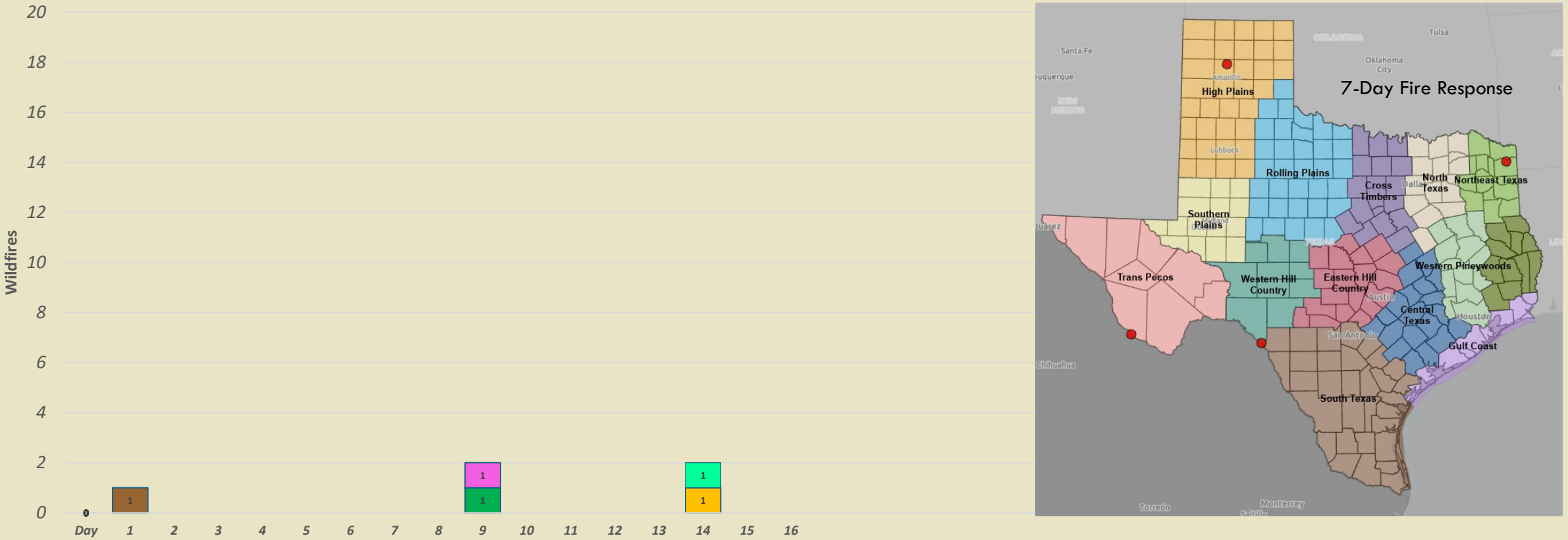
- A drying pattern will return to the state this weekend as high pressure strengthens. Temperatures will be well above normal for much of the state, and rainfall will be limited after Friday.

- The fire environment will support limited fire activity during the outlook due to fuel moisture remaining normal to above normal after recent rainfall, with the exception of the Trans Pecos and lower Western Hill Country PSA. Fire potential will be low and focused in and around where dry fuels are still present in the Rio Grande drainage, and Trans Pecos mountain ranges.

- Despite a dry and warm environment, transitional green grasses will continue to strengthen in parts of the High Plains, keeping fire potential low and limiting fire growth to initial attack fires when exposed to elevated fire weather Sunday-Tuesday.

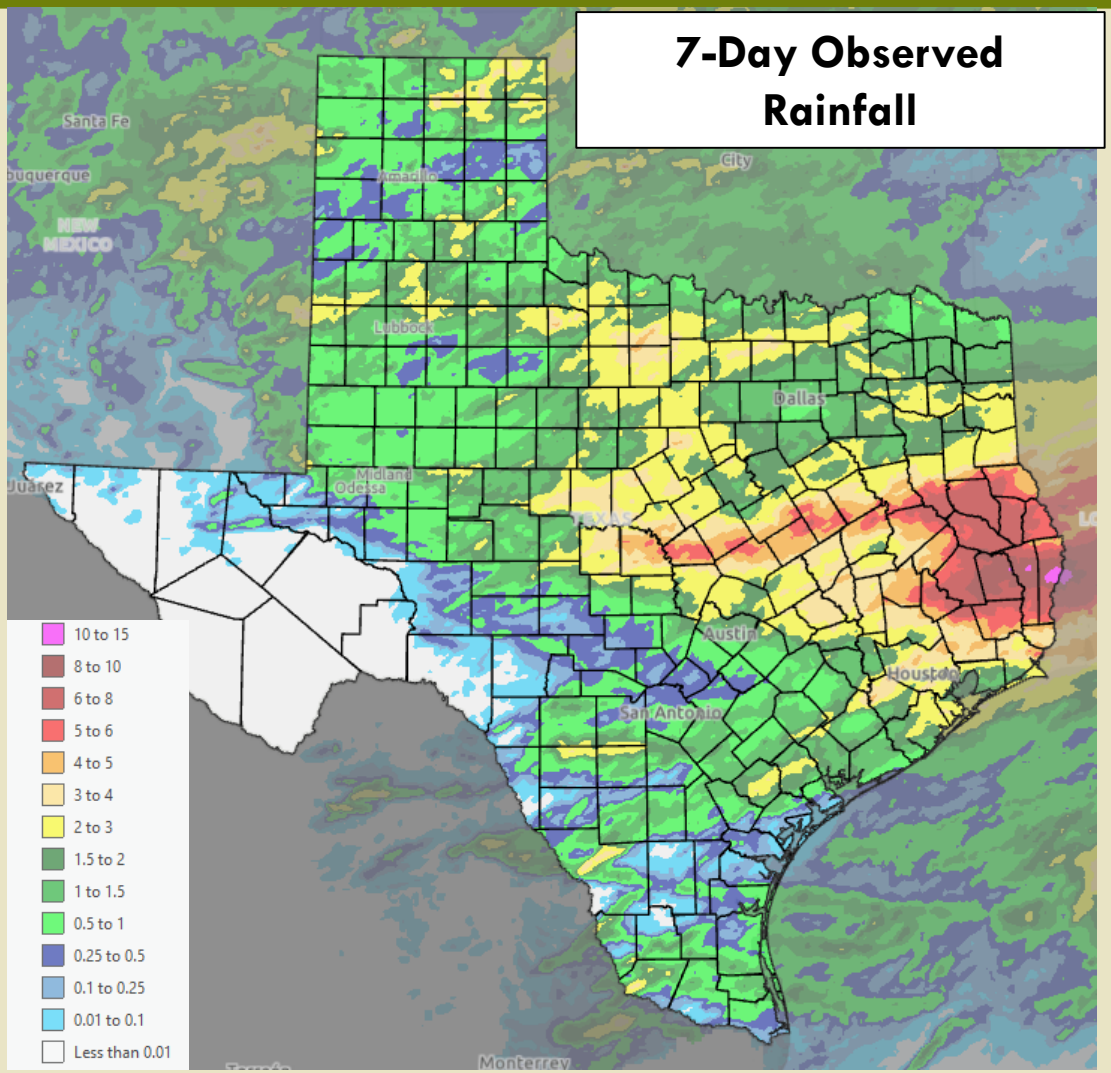
Over the past 14 days several rounds of widespread rainfall have occurred across a large swath of the state, leaving only pockets of dry fuels. Fire activity reflects where those pockets exist. Recent fire activity has had low resistance to control.

May 1st-May 16th ,2024 Daily Texas A&M Forest Service Wildfire Response by Predictive Service Area

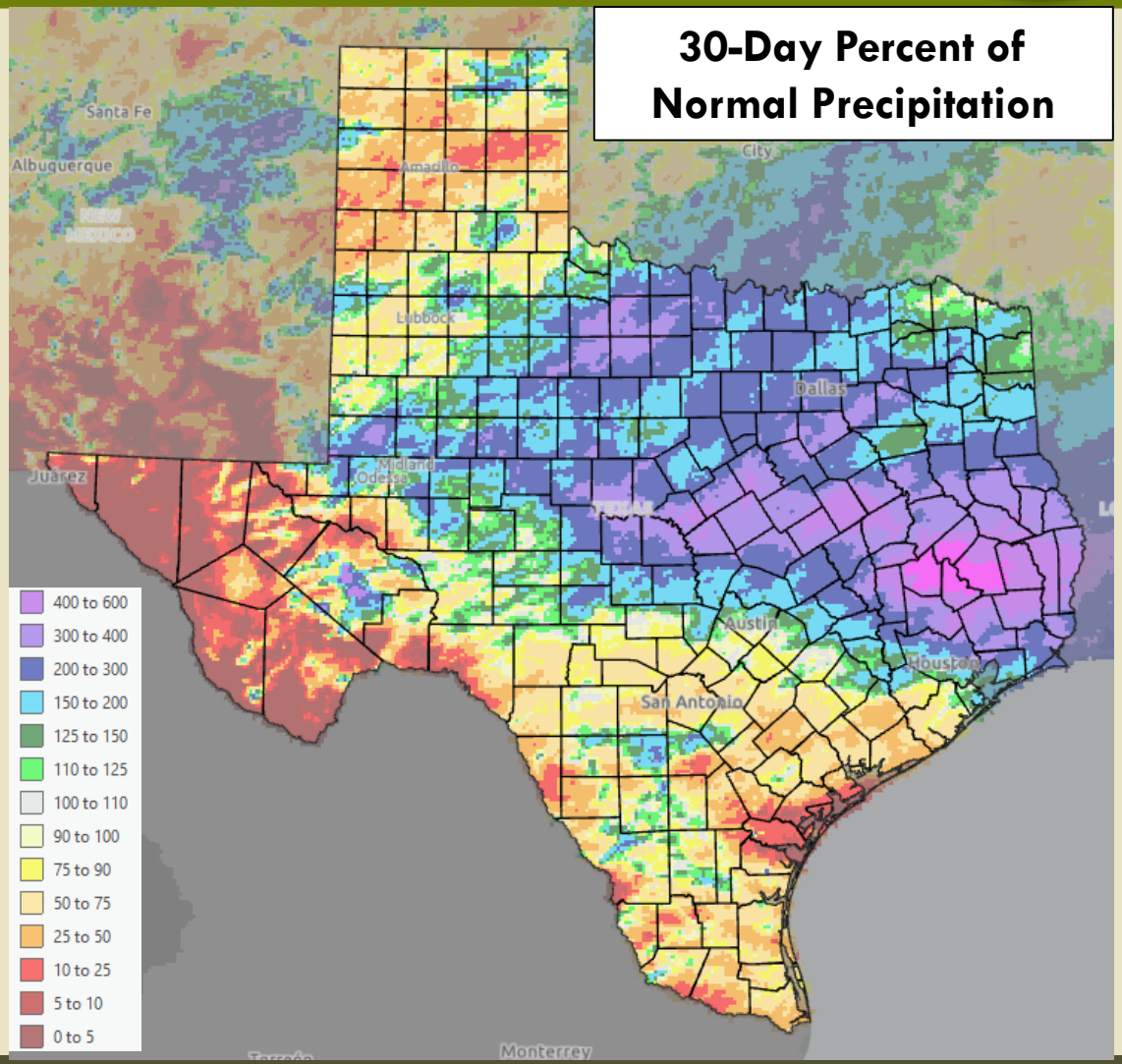


The 7-day observed rainfall map shows that storms have generally initiated east of the Pecos River. Drying will continue in the Trans Pecos Mountains and along the Rio Grande to Val Verde County. Precipitation falling on the morning of 05/17 is not yet captured on these maps and will improve areas south of the Austin to Houston line.

7-Day Observed Rainfall



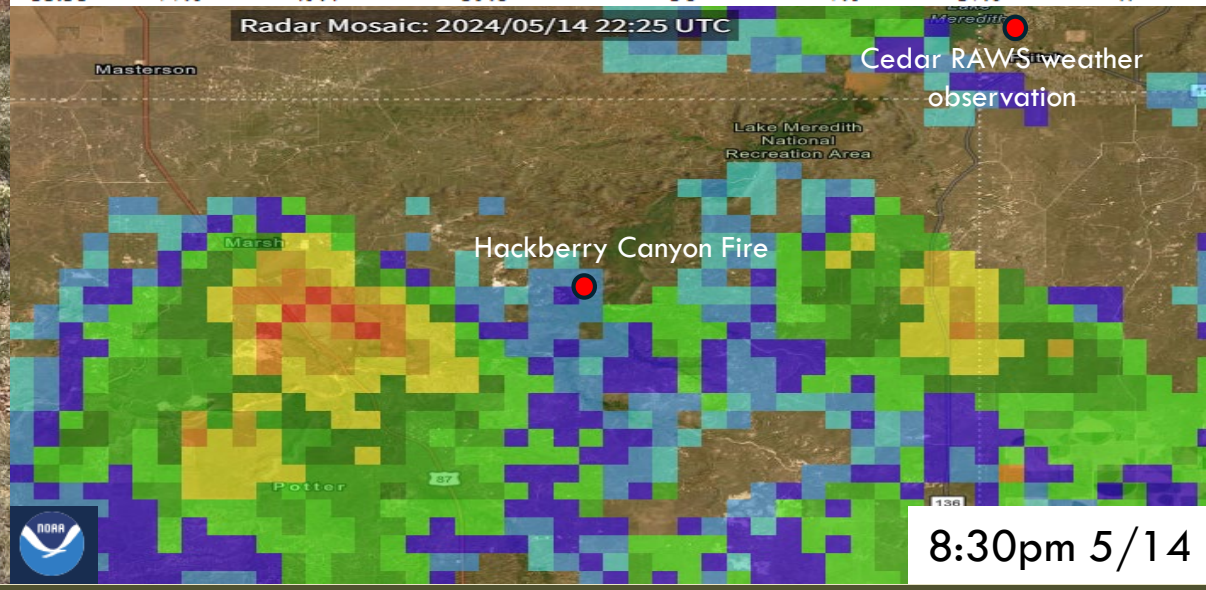
30-Day Percent of Normal Precipitation



The 1,088-acre Hackberry Canyon Fire was started by lightning on 5/14 in complex terrain in the Canadian River Valley near Lake Meridith. The fire environment was characterized by transitional grasses, erratic and shifting thunderstorm outflow winds gusting to 30mph, and upslope runs. Good overnight moisture recovery followed by rainfall led to diminished fire behavior.


Photo by M. Nicoletti

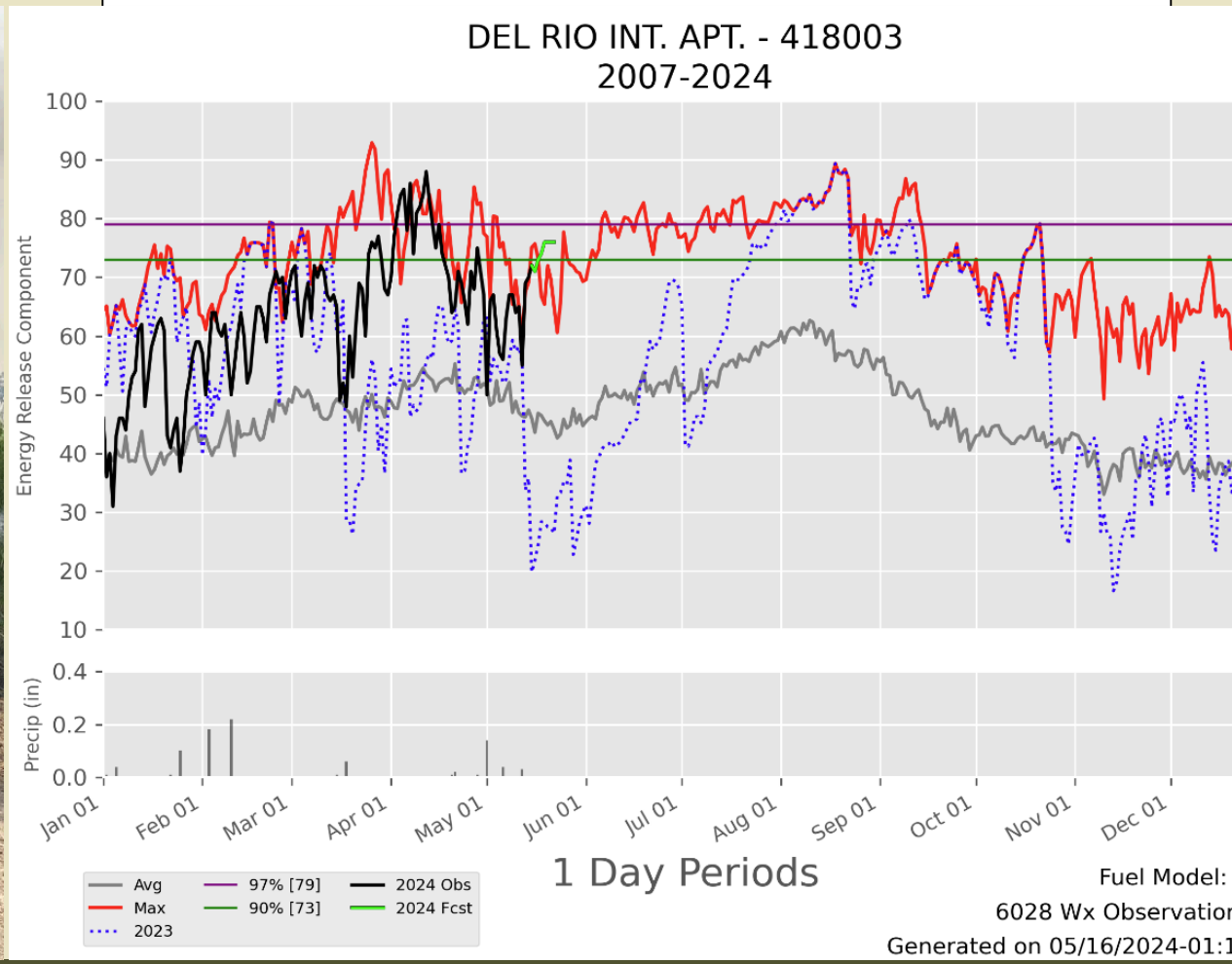
Time (CDT)	2.0m Temperature °F	2.0m Dew Point °F	2.0m Wet bulb temperature °F	2.0m Relative Humidity %	6.1m Wind Speed mph	6.1m Wind Gust mph	6.1m Wind Direction
22:35	78.0	39.3	56.0	25	11.0	27.0	WSW
21:35	77.0	48.7	59.5	37	14.0	28.0	S
20:35	79.0	47.4	59.6	33	17.0	28.0	SSE
19:35	86.0	36.1	57.8	17	11.0	18.0	S
18:35	87.0	36.9	58.4	17	9.0	20.0	SSW
17:35	87.0	39.7	59.3	19	8.0	20.0	SSW
16:35	88.0	40.5	59.9	19	9.0	21.0	SSW
15:35	90.0	43.5	61.6	20	11.0	20.0	SW
14:35	88.0	45.5	61.8	23	9.0	24.0	WSW
13:35	85.0	48.2	61.9	28	10.0	20.0	WSW
12:35	82.0	48.4	61.0	31	10.0	22.0	WSW
11:35	77.0	49.4	59.8	38	7.0	17.0	W



The 165-acre Zorro fire occurred along the Rio Grande in Val Verde County on 5/14. Fuels in this area are dense and mainly consist of scrub brush, mesquite, and river cane. Fires in this fuel type are limited in spread potential as fuels become sparse upslope from the river.

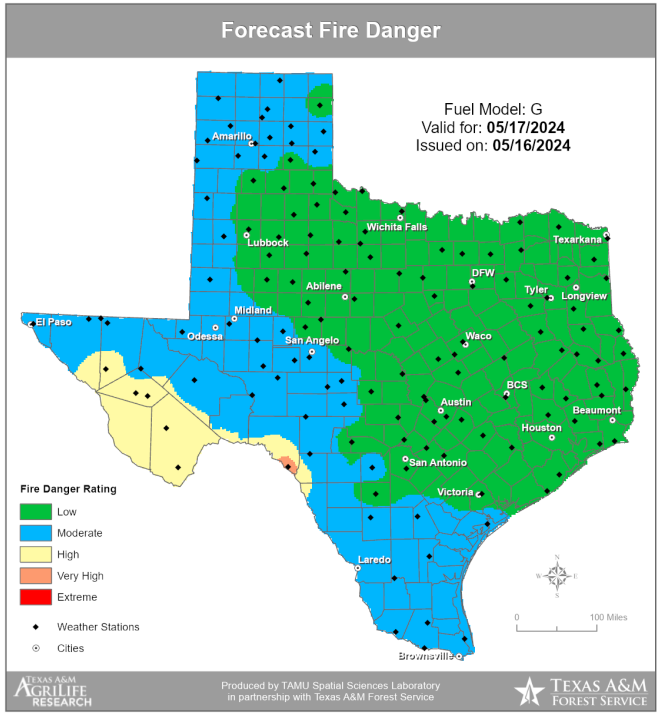
Active fire behavior in brush understory causing torching in mesquite. Photo by T. Kendrick.

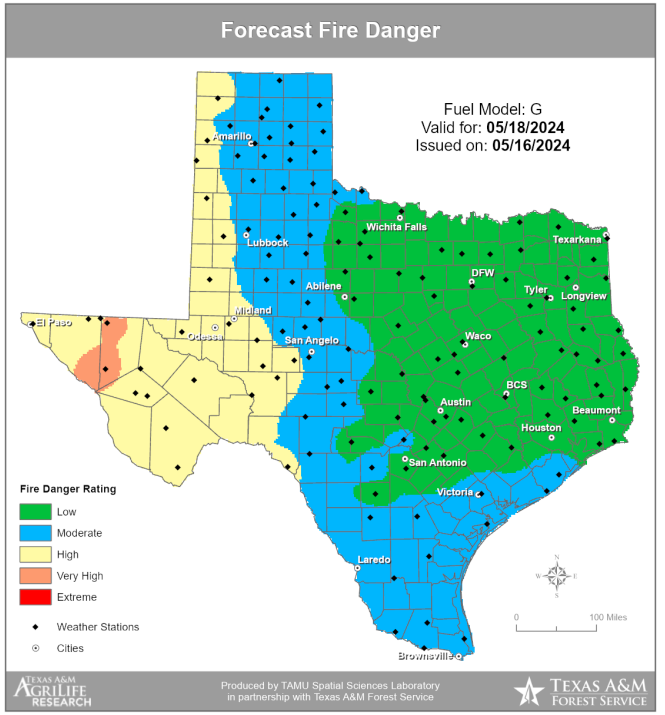
Fuel dryness in Del Rio will continue rise and remain near or above the 90th percentile as shown in ERC graph.

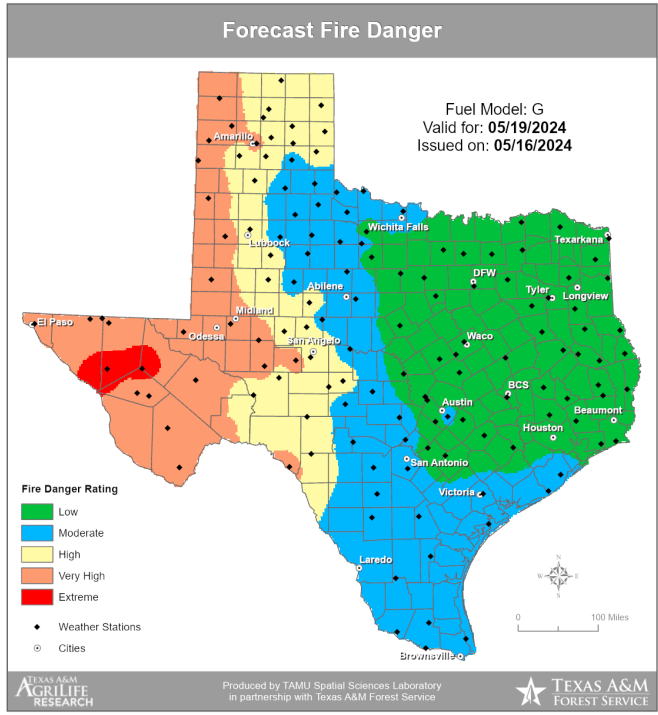


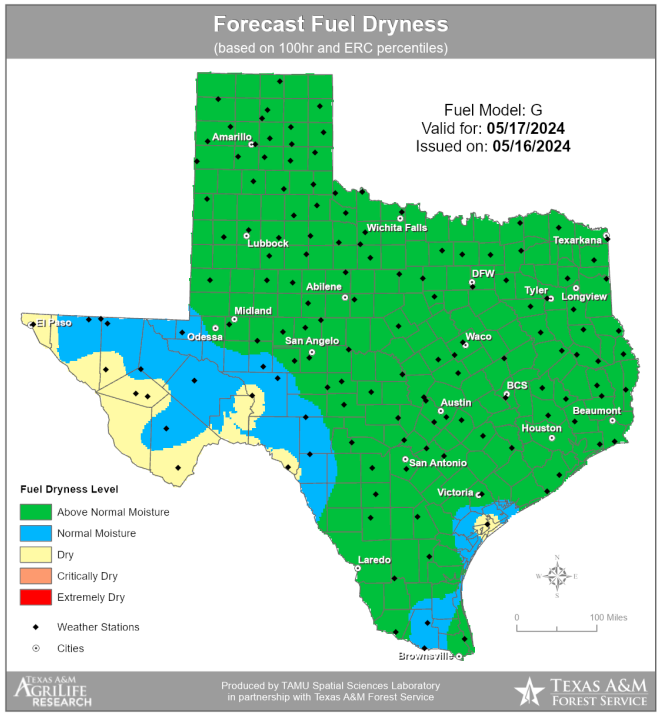
Forecast fire danger graphics highlight the drying trend and warm weather pattern through this weekend. However, the forecast fuel dryness graphic reflects fuels will not be critically dry outside of the Trans Pecos and near Del Rio. Fuel loading in these areas is limited to drainages of the Rio Grande. Fire potential will remain low in the Trans Pecos.

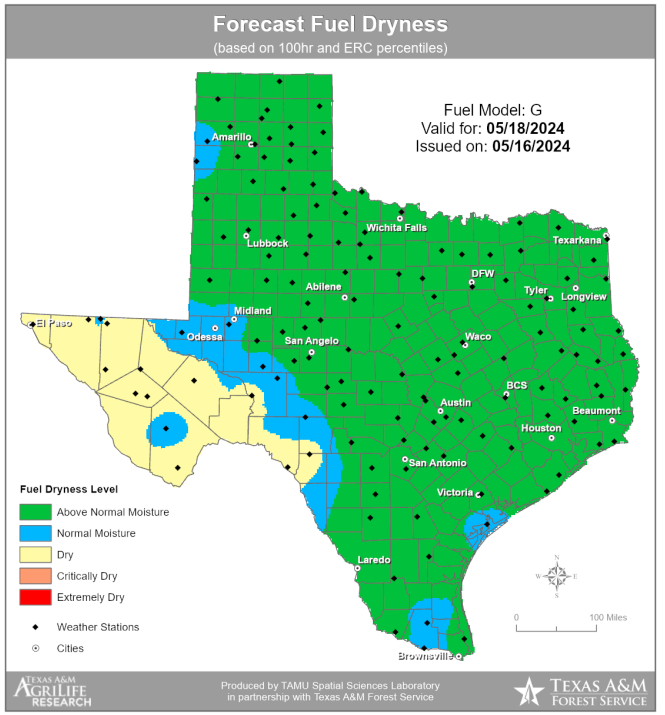
The High Plains will be exposed to elevated fire weather beginning Sunday, but forecast fuel dryness will remain near normal, limiting fire potential.

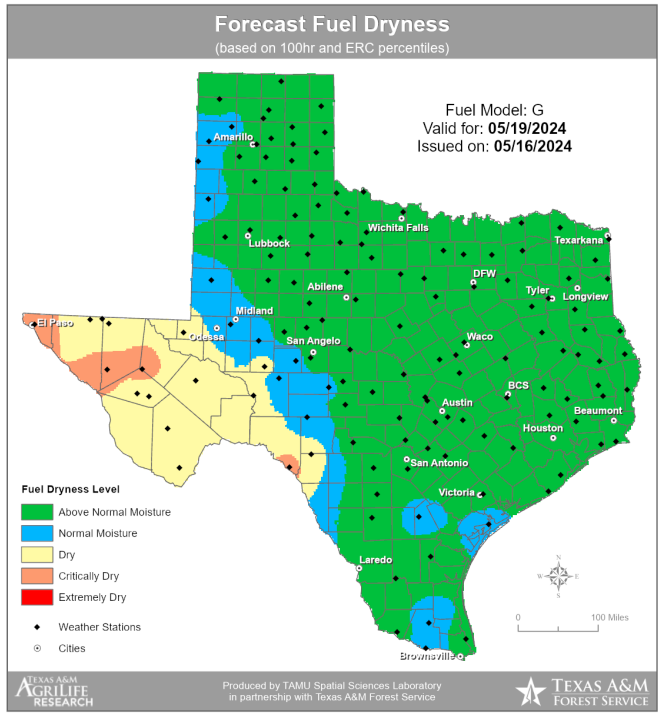






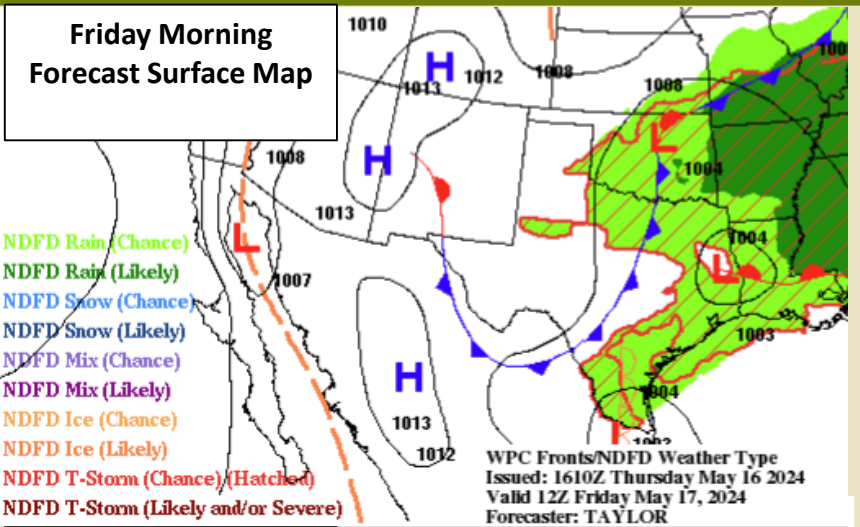




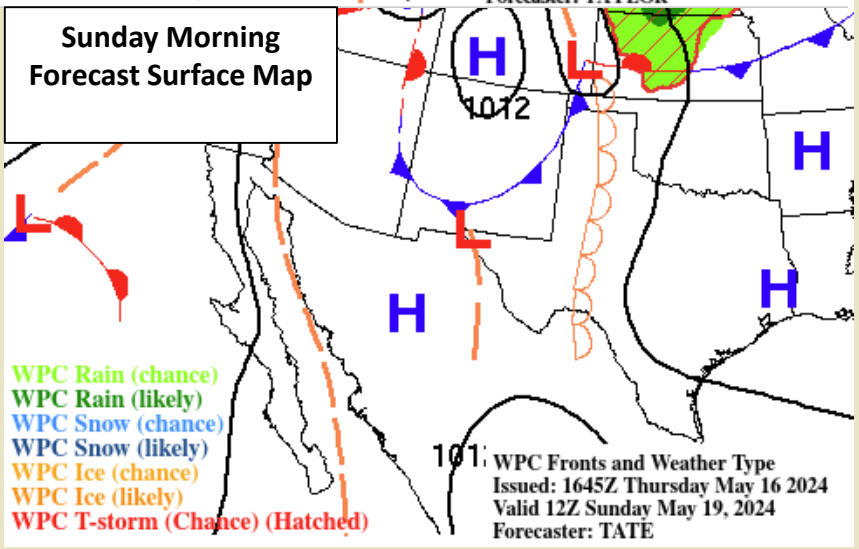


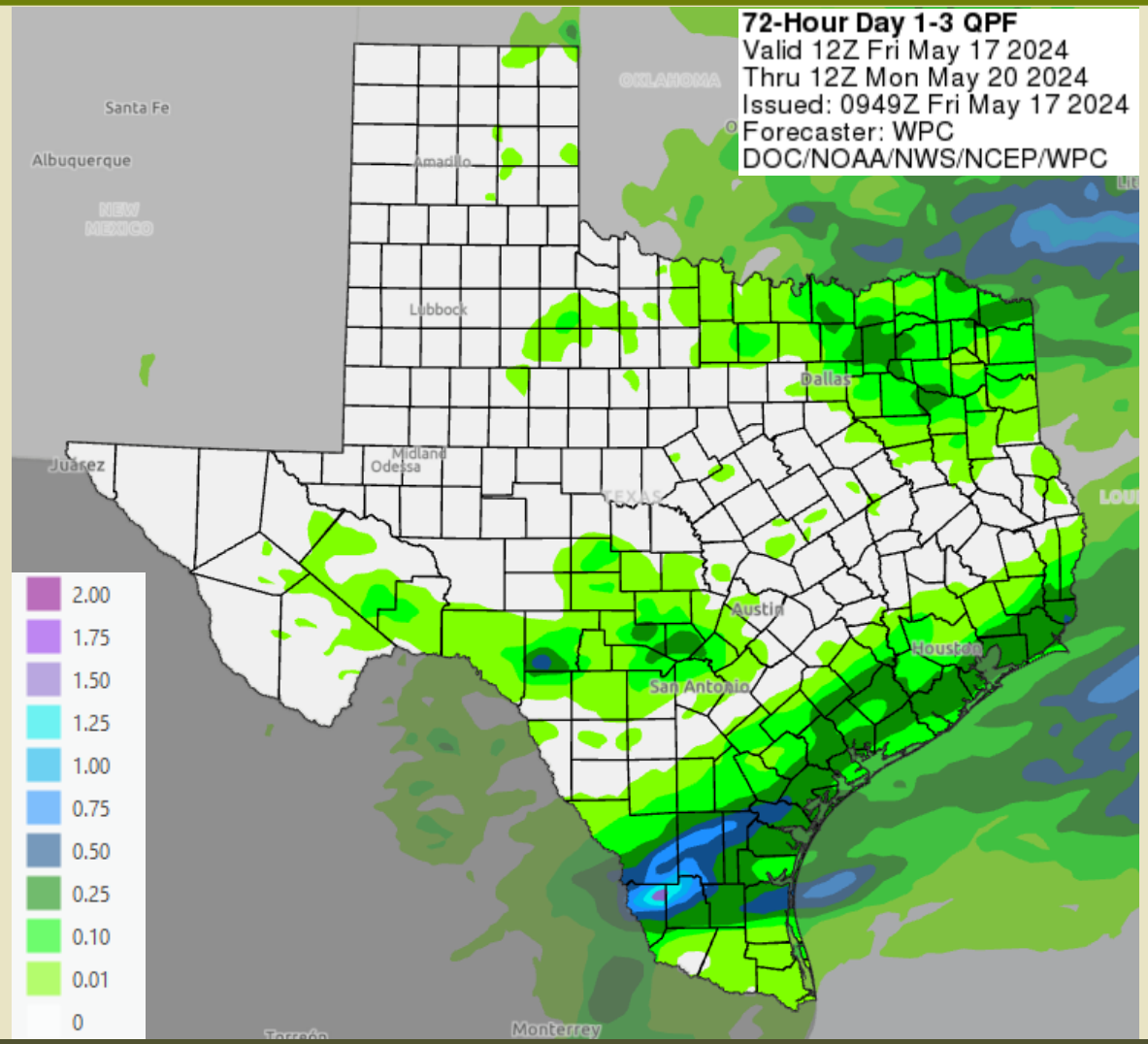
A cold front will move moisture east and out of the state on Friday, followed by a ridge of high pressure creating hot and dry conditions through the weekend. A dryline will move into the High Plains and Trans Pecos beginning Sunday.

Friday Morning Forecast Surface Map



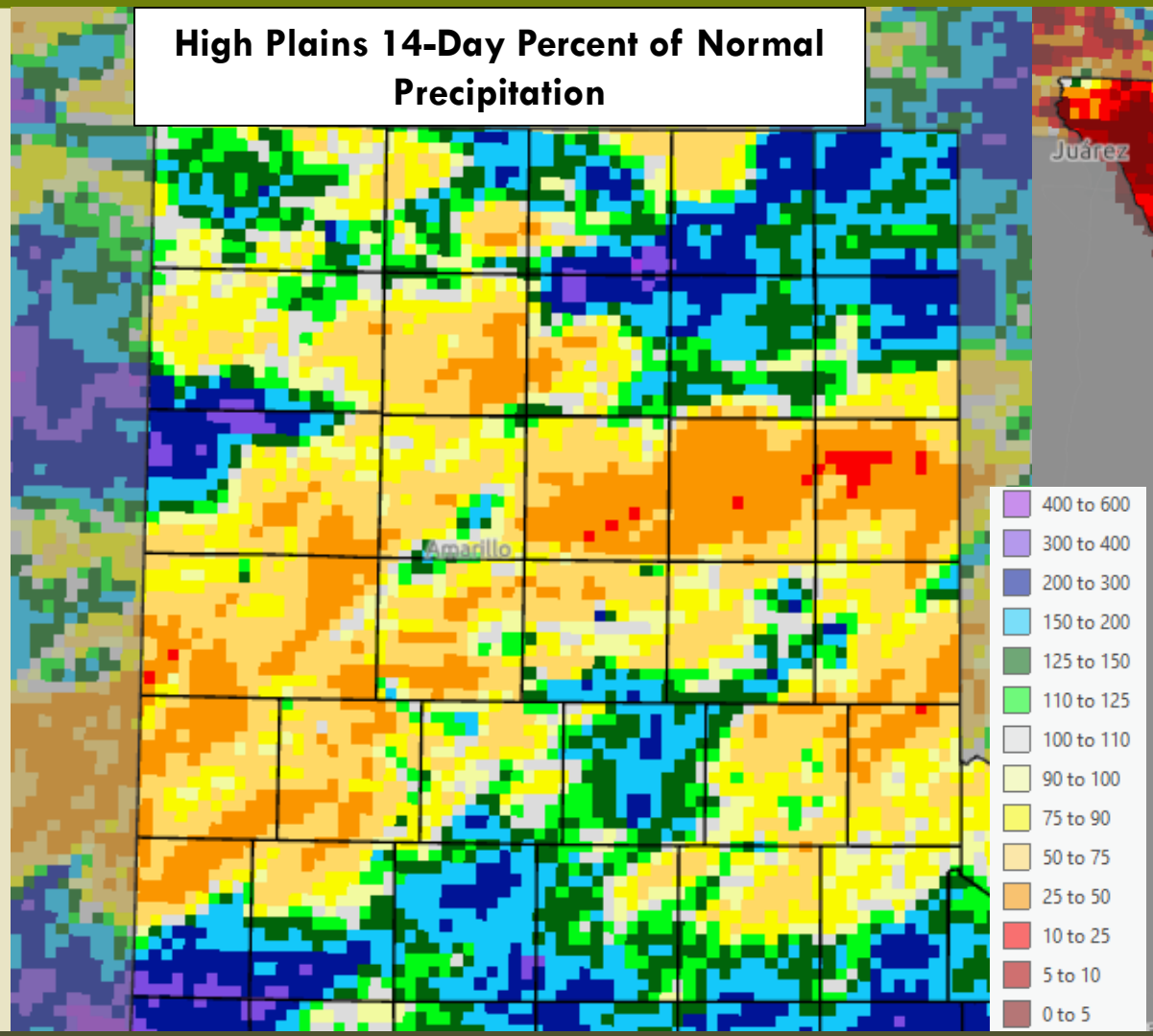
Sunday Morning Forecast Surface Map



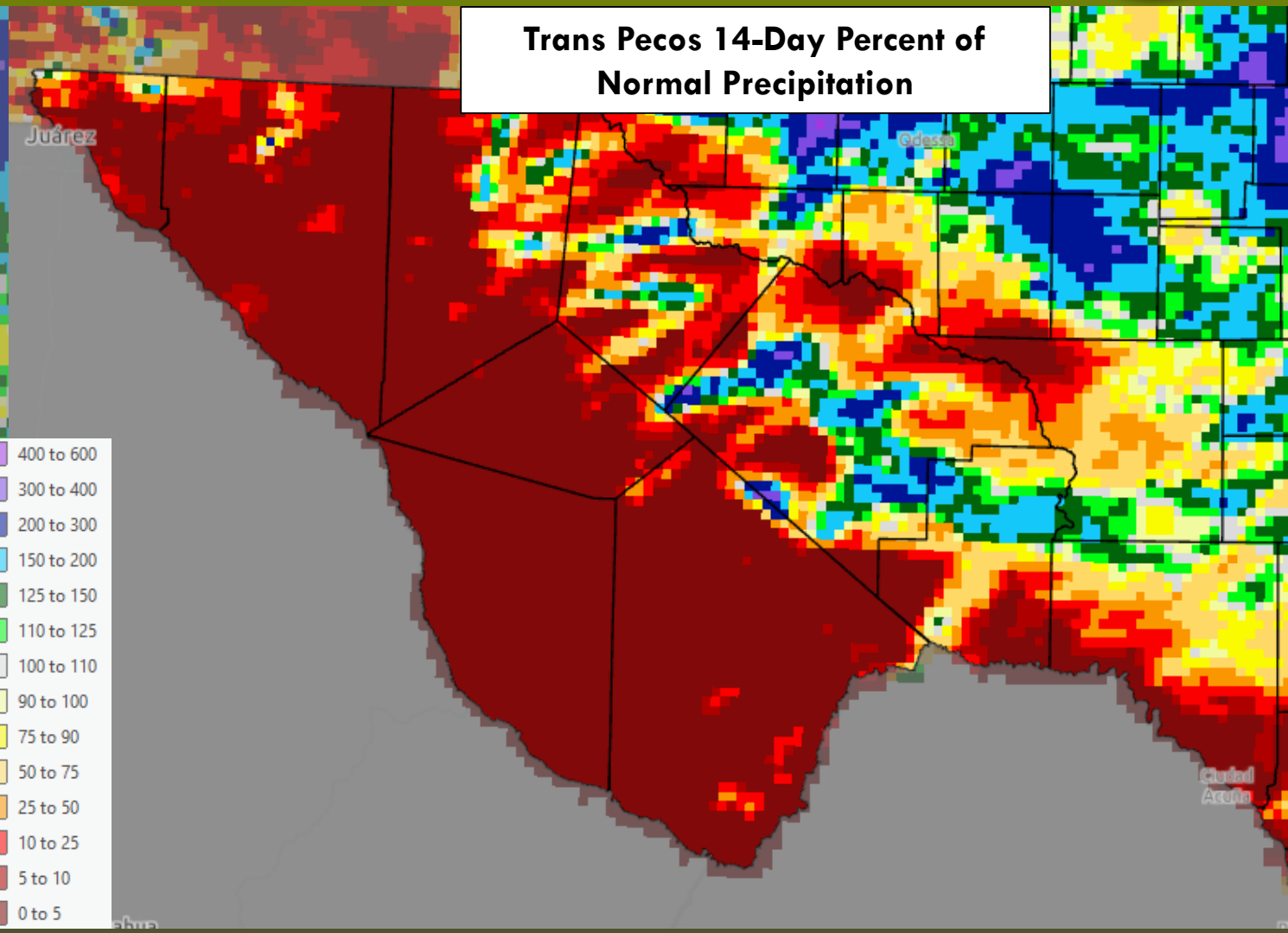


14-day percent of normal rainfall maps in the High Plains and Trans Pecos PSA shows where localized rainfall associated with scattered storms has occurred. Pockets of dry fuel remain in the western Canadian River valley in the High Plains. The mountains of the Trans Pecos and along the Rio Grande into the Western Hill Country.

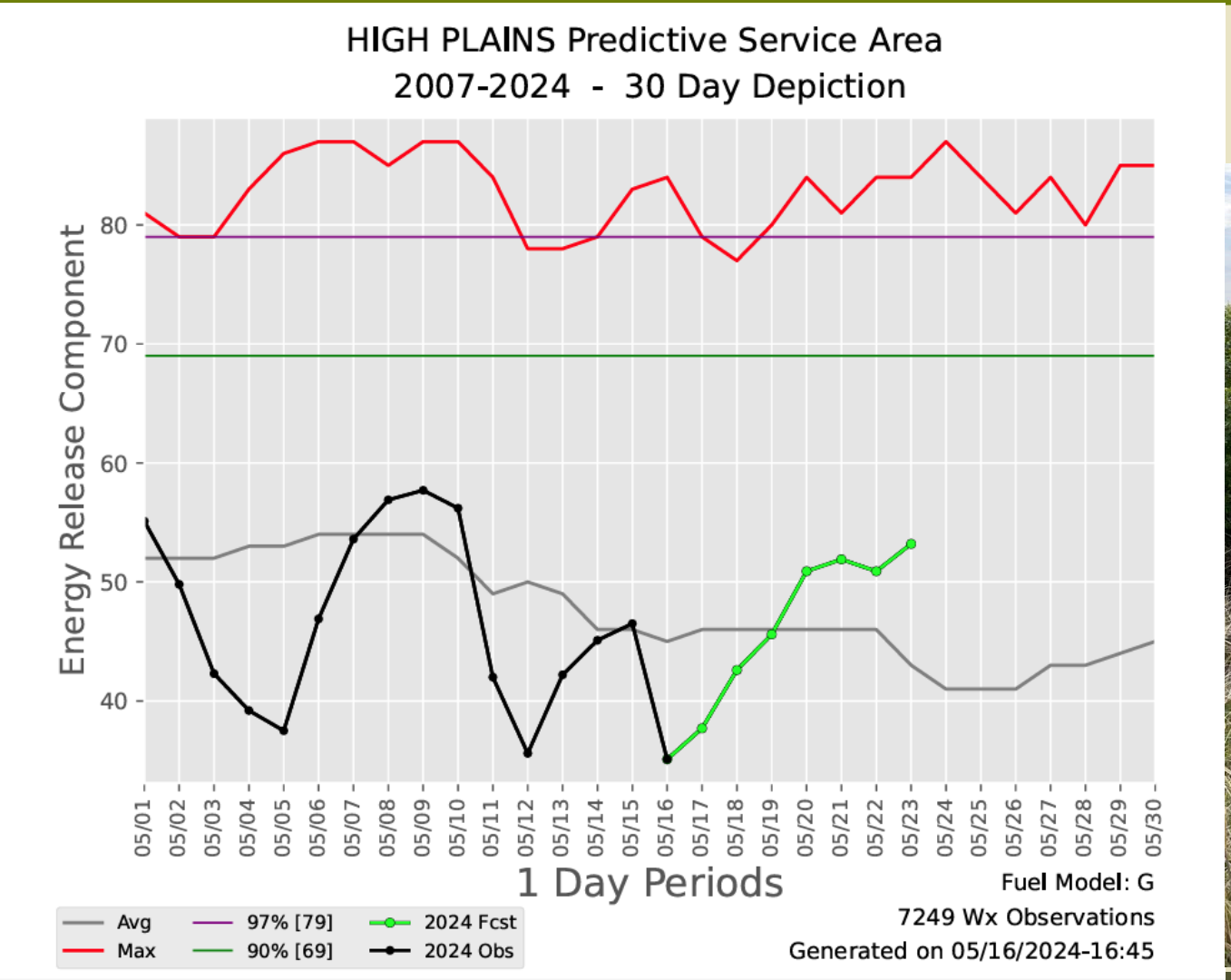
High Plains 14-Day Percent of Normal Precipitation



Trans Pecos 14-Day Percent of Normal Precipitation



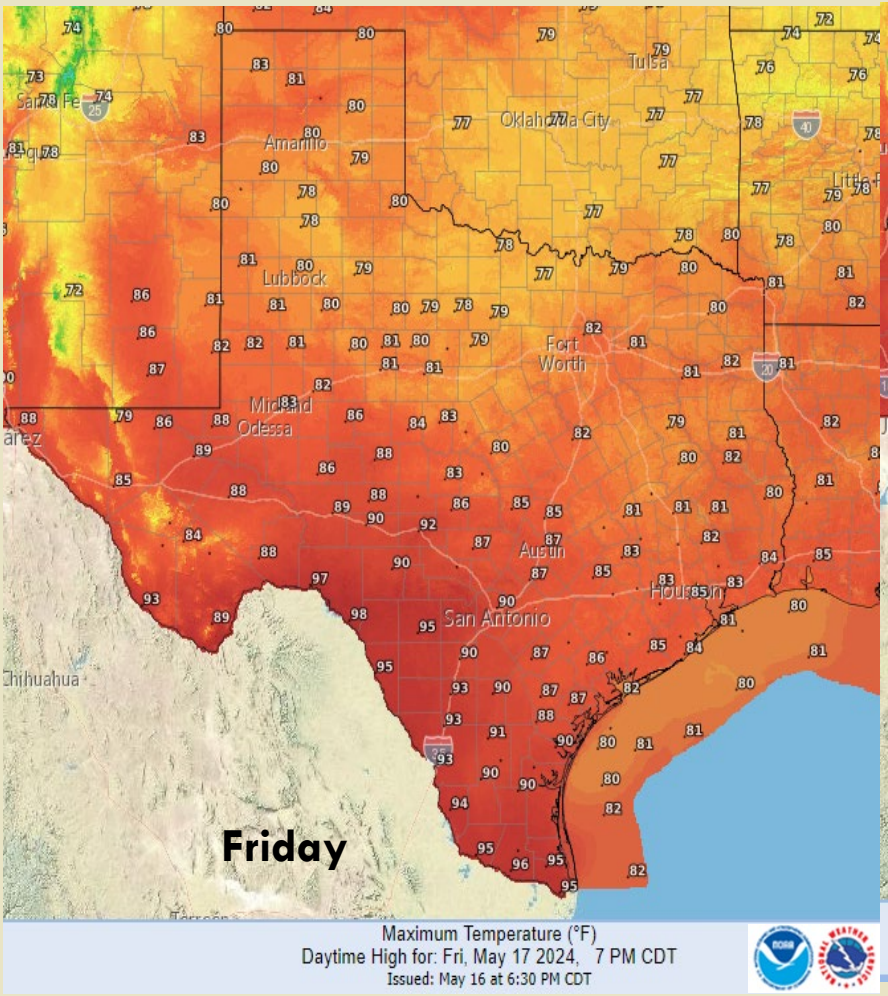
After receiving rainfall this week High Plains energy release component (ERC) is below average, and well below critical thresholds. After multiple days of drying, forecast ERC will gradually rise in the High Plains, and pockets of grasses still dormant or entering transition will be dry enough to support initial attack fires with low resistance to control.

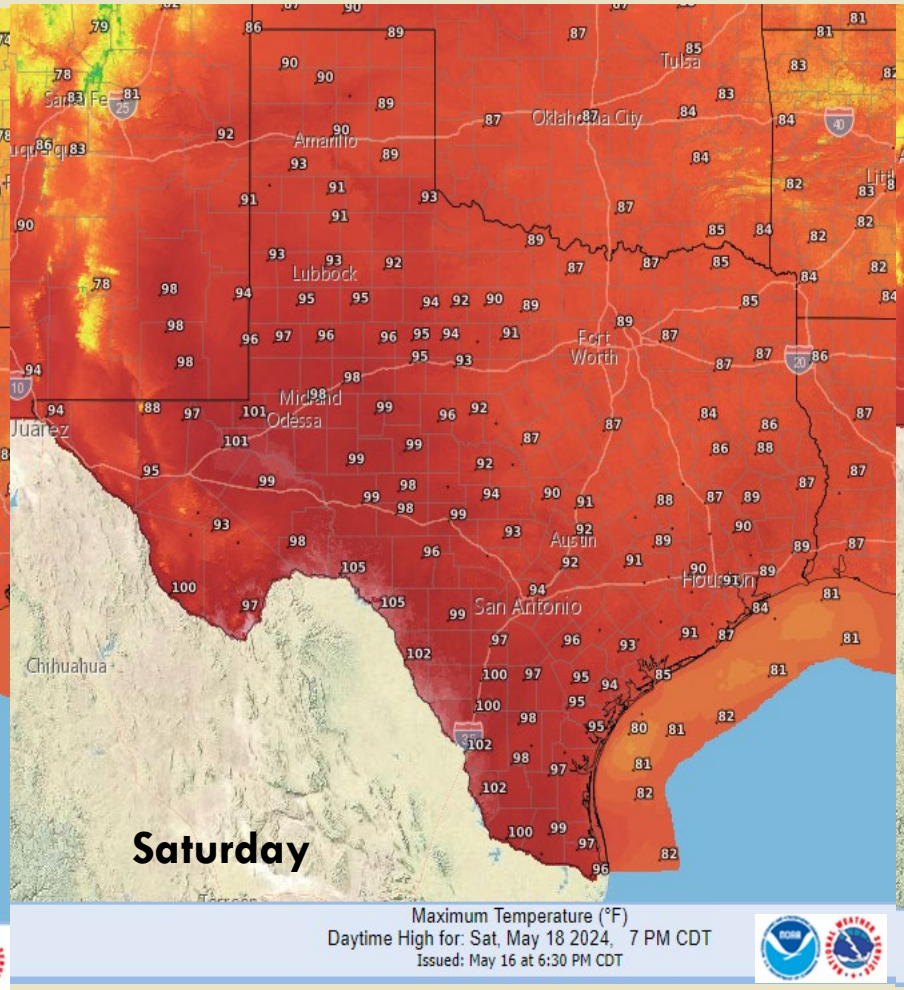


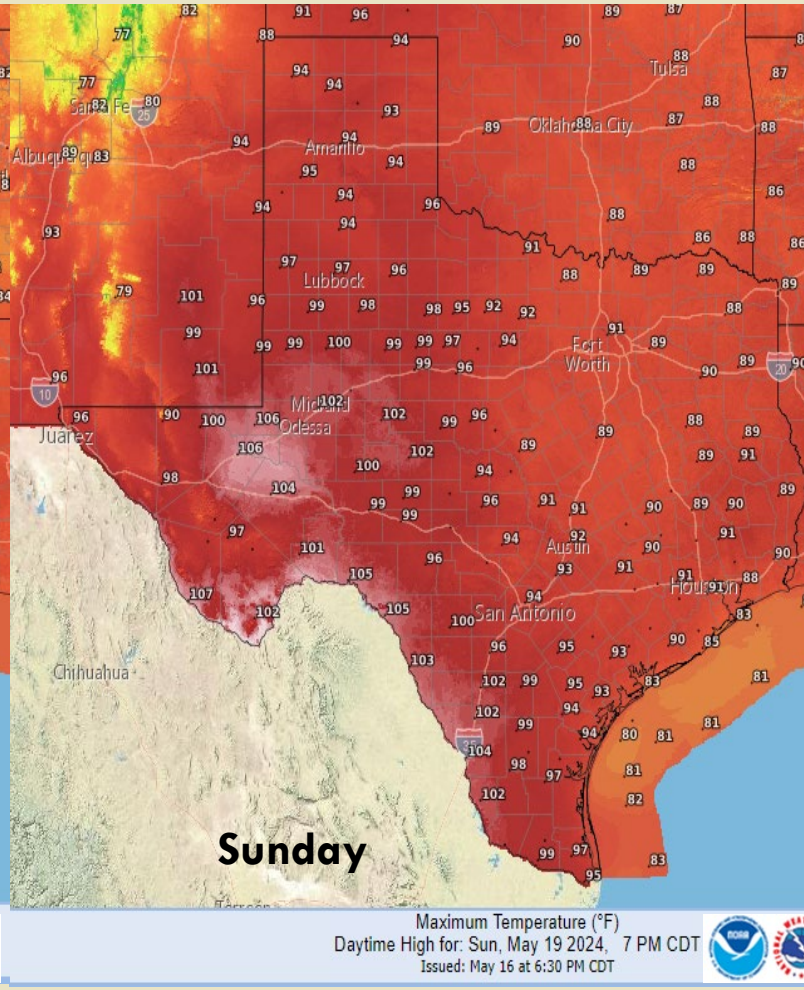
High loading of grasses in Potter County along western Canadian River valley taken on 5/13, before most recent rainfall. These grasses will continue to transition, but still carry enough dormant cured grass to support small fires if exposed to elevated fire weather.

Photo by A. Johnson

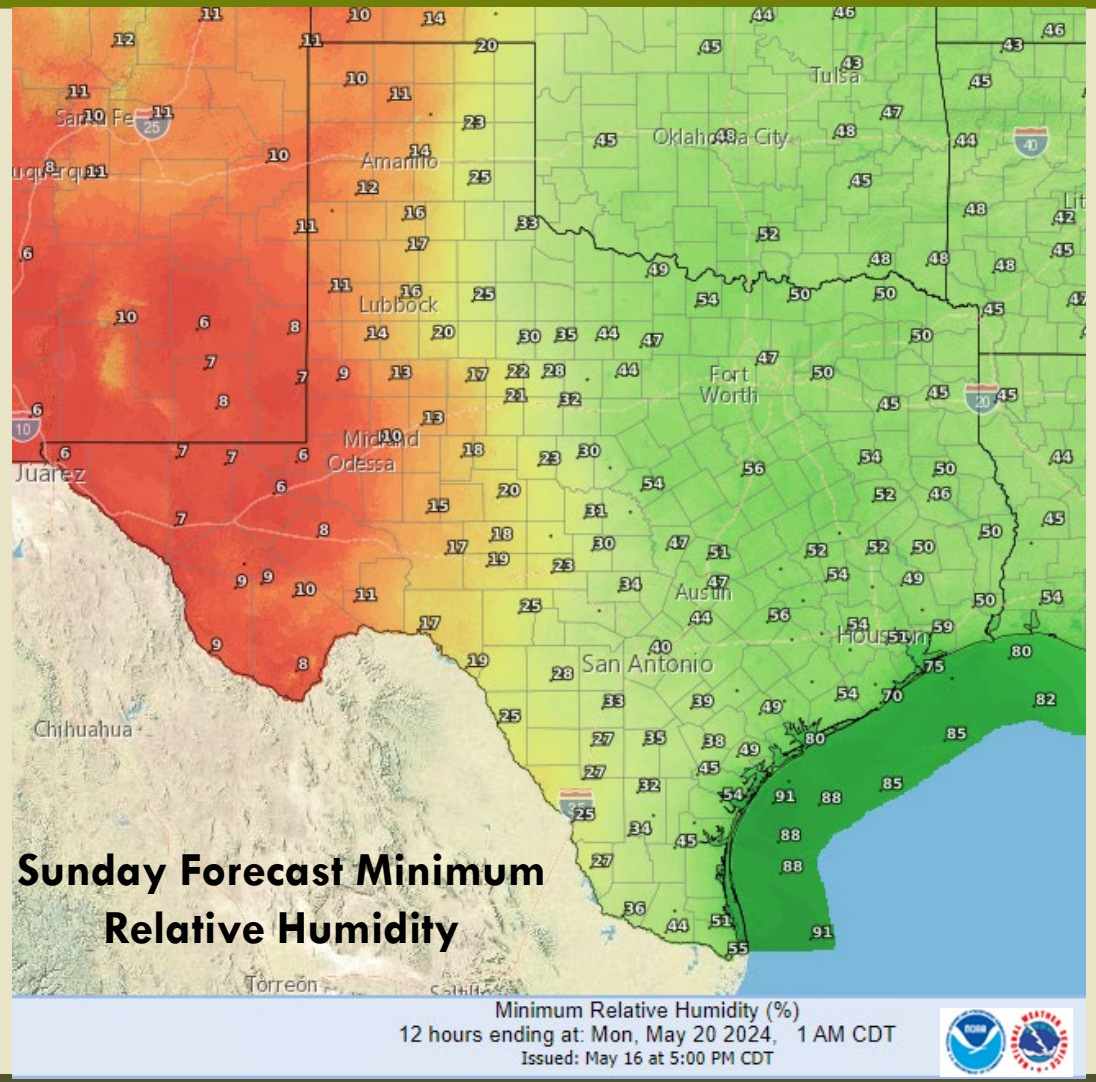
Surface heating of fuels will begin this weekend as high pressure builds over the state. A dry and hot environment will cause fuel moistures to decline in the Western Hill Country and Trans Pecos.



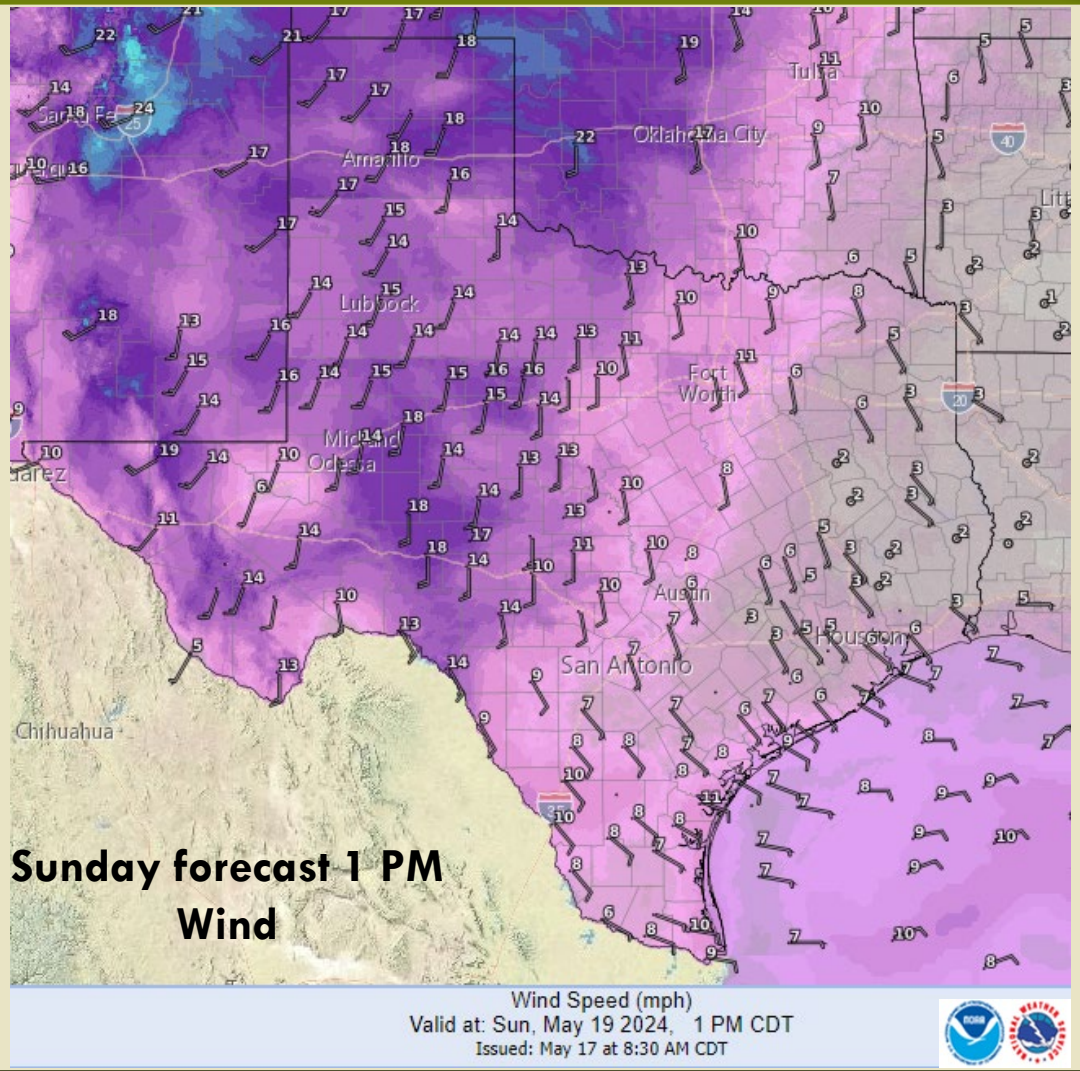




Sunday will see low potential for fires with low resistance to control in the western Canadian river valley in areas still in transitional green up, and the dry cured grasses of the Davis Mountains, and Rio Grande river drainage when exposed to elevated fire weather. Elevated fire weather will begin to lower fuel moistures in the High Plains.

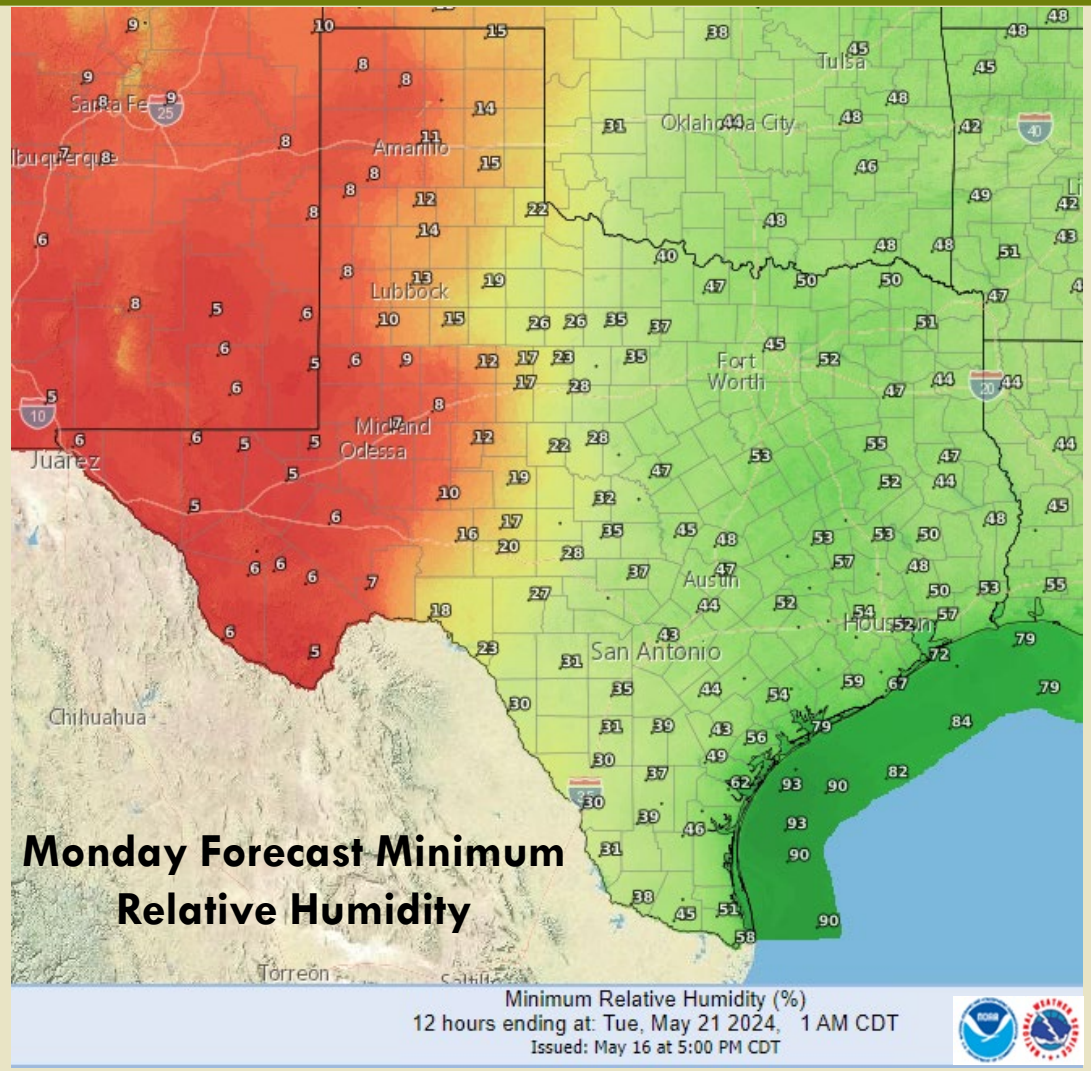


Sunday Forecast Minimum Relative Humidity

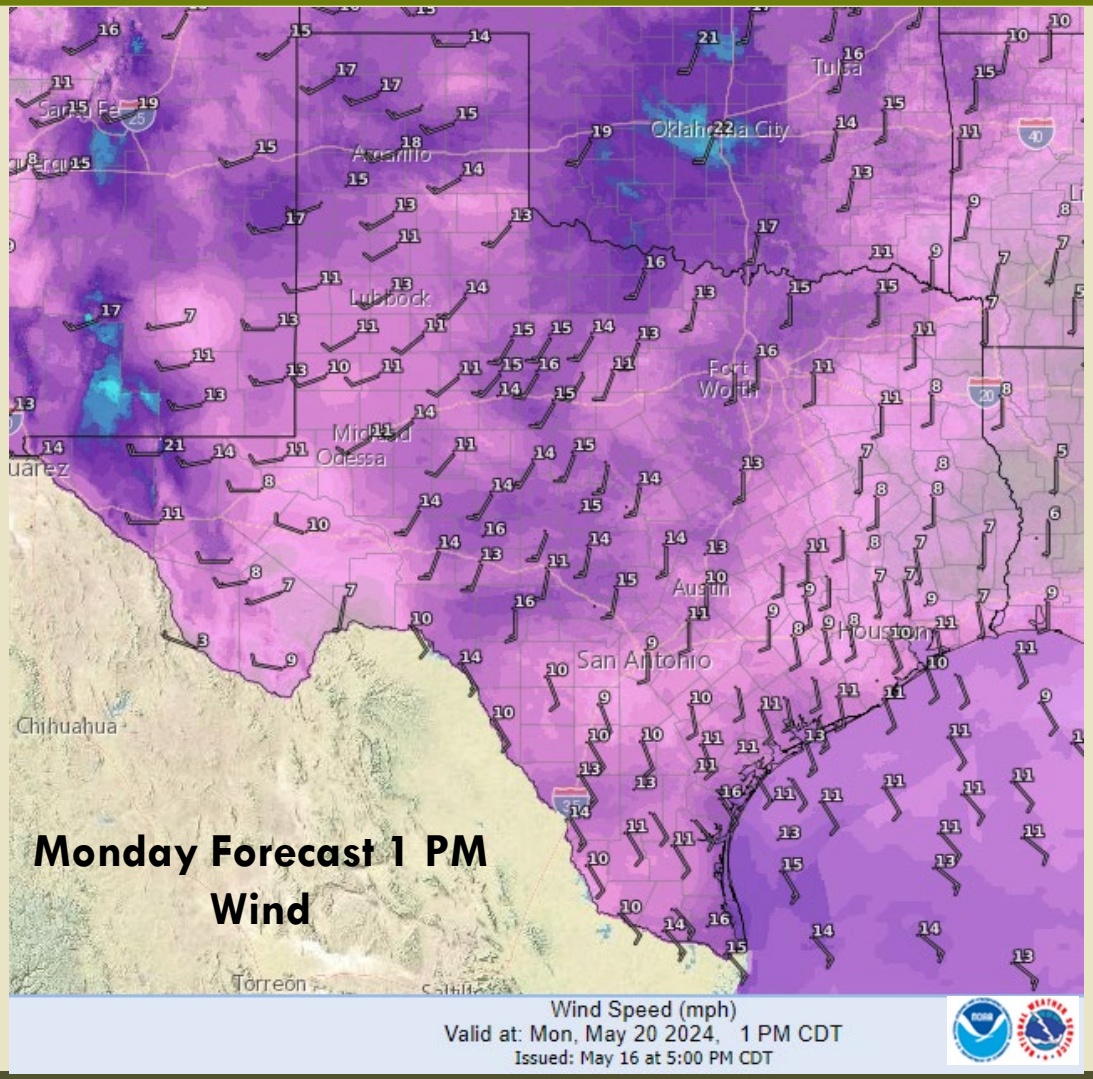


Sunday forecast 1 PM Wind

Dry southwest flow, and well above normal temperatures will overlay the High Plains to the Trans Pecos on Monday. There is low fire potential with low resistance to control where pockets of dormant dry grasses are still present in the northwestern High Plains and Trans Pecos.



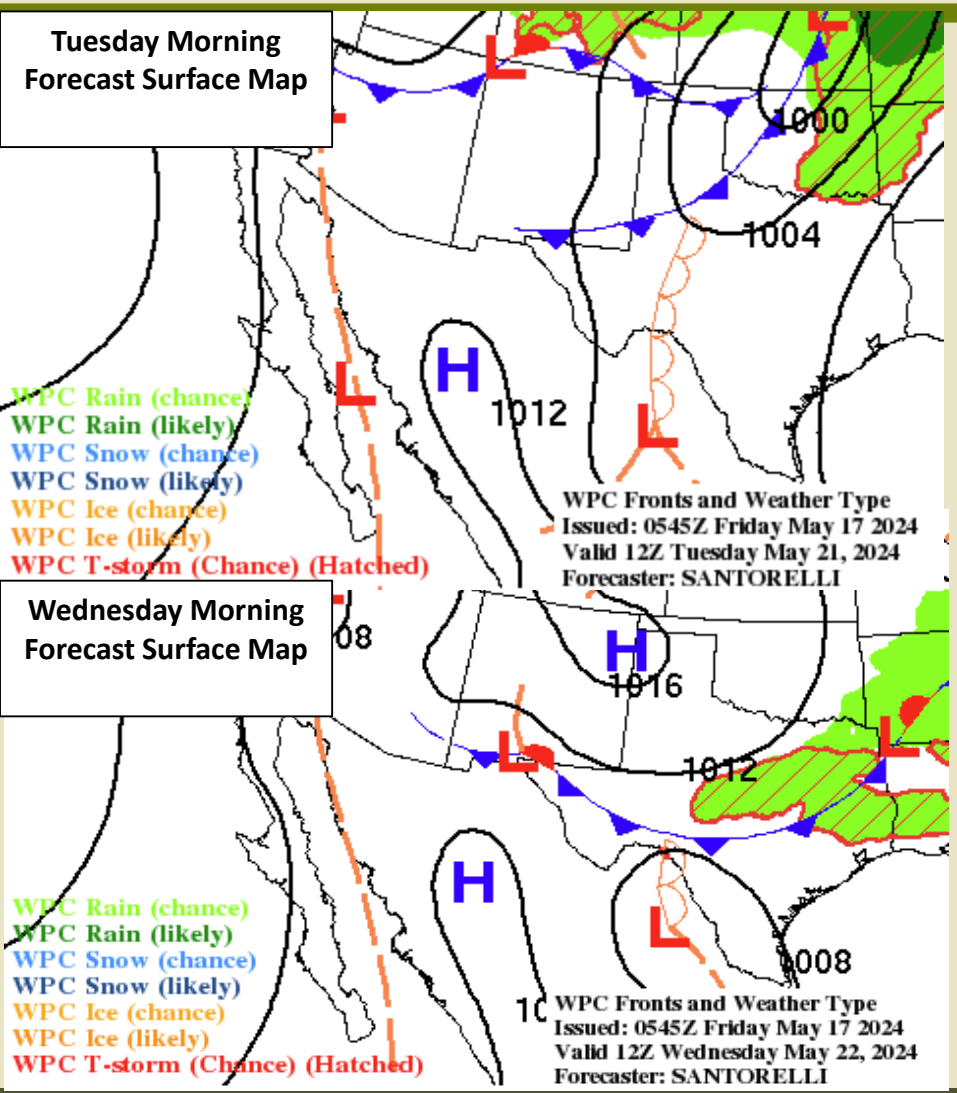
Monday Forecast Minimum Relative Humidity



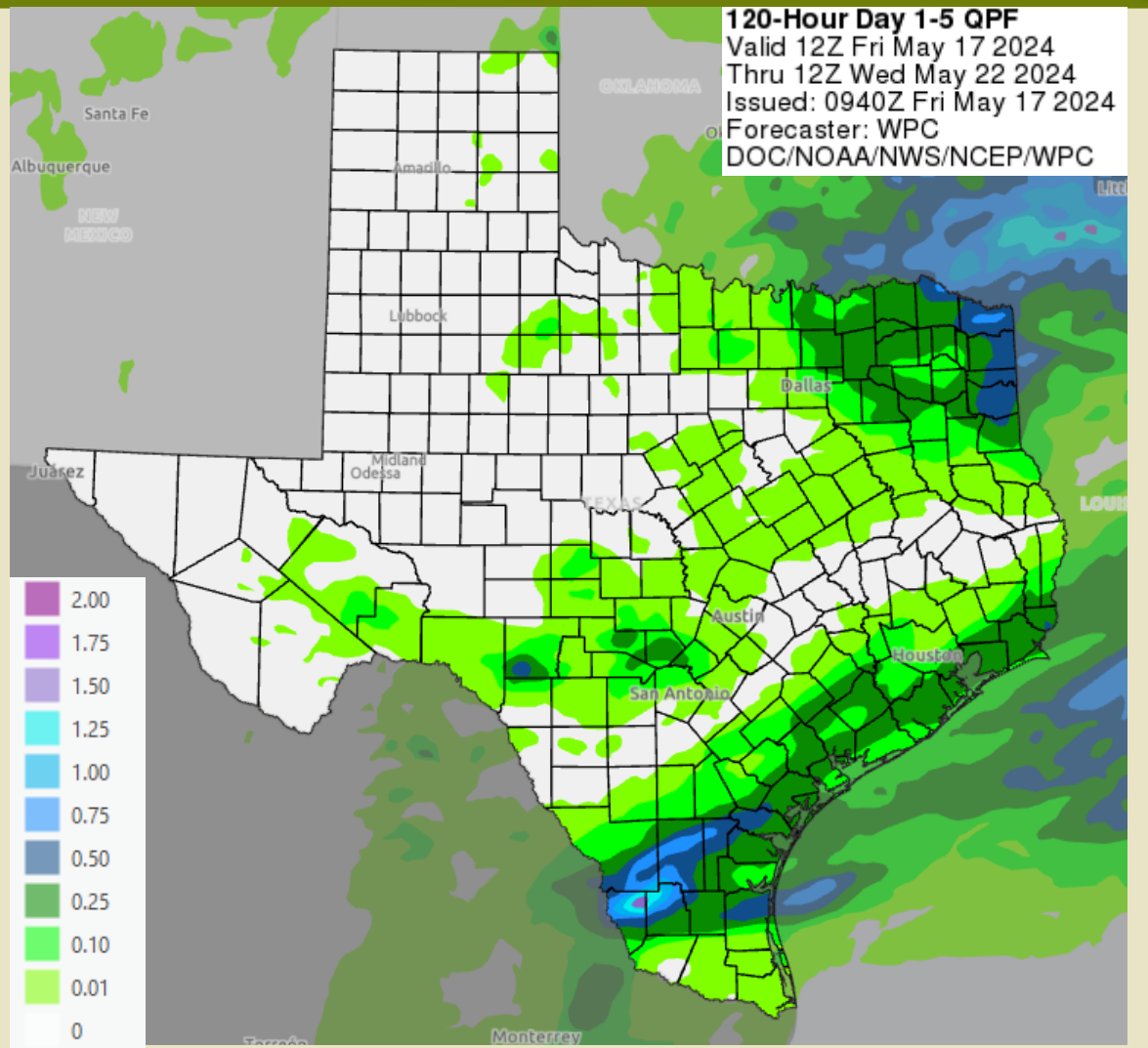
Monday Forecast 1 PM Wind

Forecast rainfall amounts in South Texas are occurring on 5/17, and the majority of the state will remain dry until a frontal passage next Wednesday brings rain chances in central to east Texas. The majority of the Trans Pecos will continue to be dry through the outlook.

Tuesday Morning Forecast Surface Map



Wednesday Morning Forecast Surface Map



Trans Pecos energy release component is forecast to rise over the 90th percentile next week, signifying critically dry fuels. A lack of lightning activity necessary to facilitate fires in the mountains of the Trans Pecos is forecast to continue through the outlook, limiting fire potential.