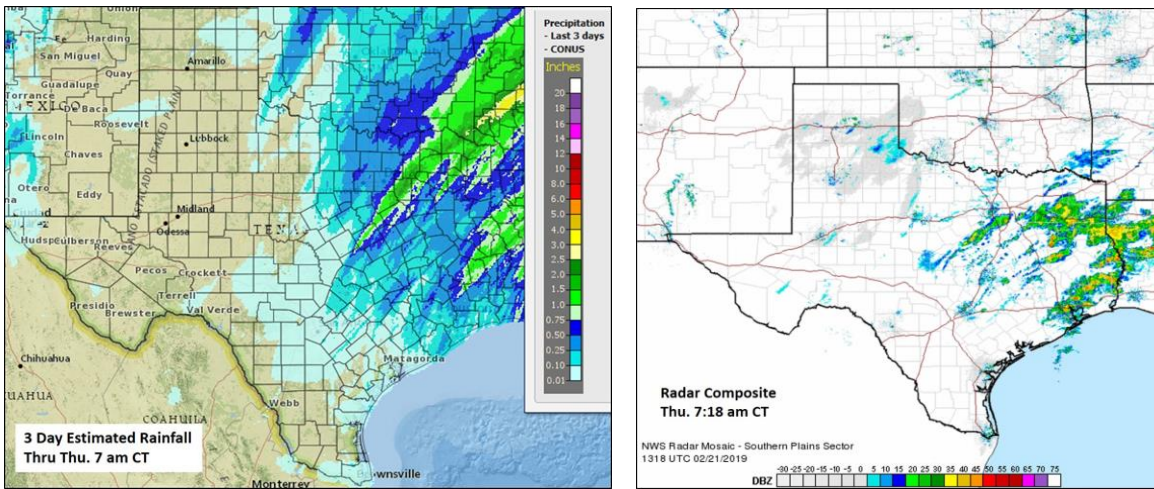


# TFS WEATHER BRIEF

**Thursday, February 21**

**Current:** Cool, cloudy conditions were common this morning with only far western Texas experiencing clear skies. Winds were light statewide. RH recoveries were poor over the upper Trans-Pecos and fair to good elsewhere from the western High Plains to the Pecos River Valley. Showers and embedded thunderstorms dotted north-central and eastern areas with the heaviest rainfall across the eastern third. Modest three day rain totals were focused in the same region:



**Today: Elevated to Near Critical Fire WX Upper Trans-Pecos to Western High Plains; Scattered Showers Eastern Half!**

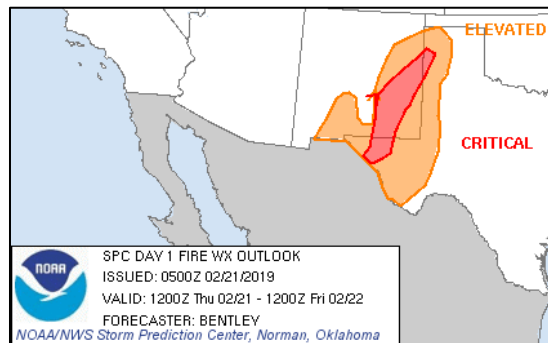
**Impacts:** Elevated to near critical fire weather conditions will develop by midday from the upper Trans-Pecos (TP) to the western High Plains (HP), mainly affecting the New Mexico collar counties as gusty southwest winds combine with RH values below 20%. Showers and embedded storms over the eastern half will not be concentrated and heavy enough to generate flooding concerns. Afternoon temperatures will range from slightly above normal over the west to cooler than normal where rainfall persists. Breezy south winds over the remainder of the HP southward to the Edwards Plateau will be accompanied by elevated RH, exceeding 30%.

**Fire Weather:** Elevated fire weather thresholds will be met by midday over the upper TP and early afternoon over the far western HP (sustained 20 FT surface winds above 15 mph and RH below 20%). A shorter period of near critical fire weather will be experienced in the same region as winds occasionally exceed 20 mph and RH falls below 15%. The lee-side of the Guadalupe Mountains will be most exposed. This same area witnessed poor morning RH recoveries.

**Mitigating factors:** High clouds will soon clear the upper TP but delay warming over the western HP several hours. The window for elevated to near critical fire weather is much narrower over the western HP and may not meet the prerequisite three hour timeframe.

**Forecast:** Confidence is high elevated fire weather will be observed in the area outlined above but the confidence drops on the time window those conditions occur over the western Panhandle.

Rain totals over 0.25 inch will be common over East and Southeast TX, locally exceeding 0.75 inch. Flooding will be a minimal concern however. The SPC fire weather forecast is below:



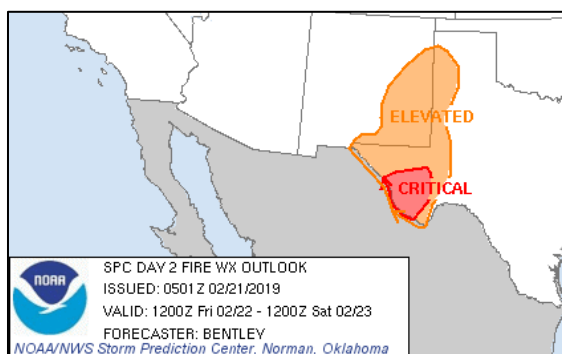
**Fri: Elevated Fire WX Western High Plains/ Trans-Pecos; Strong Storms North TX After Midnight!**

Impacts: Elevated fire weather will return to the TP, expanding into the lower TP, and edging into the western HP “collar counties” by early afternoon. Showers and storms will develop ahead of a retreating warm front across East/ Southeast TX with drizzle or light rain westward towards the I-35 corridor. Once again, rainfall should not be concentrated or heavy enough to generate flooding except on poor drainage roadways. Temperatures will be mild statewide.

Fire Weather: Elevated fire weather will extend from much of the TP to the western HP near the NM border with RH below 20% and sustained south to southwest winds over 15 mph. Near critical fire weather may be observed for several hours in the favored downwind areas of the Davis Mountains but this will be more localized. Fair to poor morning RH recoveries are expected over the TP but *excellent* RH values will occur over the entire HP.

Mitigating factors: There is low confidence on the elevated fire weather thresholds being observed outside the TP as the drier air has difficulty mixing eastward into the western HP with the low-level winds backed to the south. Cloud cover will also be plentiful outside the TP.

Forecast: The primary focus for elevated fire weather will be over the TP, and localized near critical conditions may occur near the Davis Mountains. Rainfall will return to the eastern half, heaviest over East and Southeast TX but not heavy enough to create flooding concerns. An isolated strong wind gust or marginal hail occurrence will be possible with the East TX storms during peak heating. The SPC fire weather forecast is posted below:



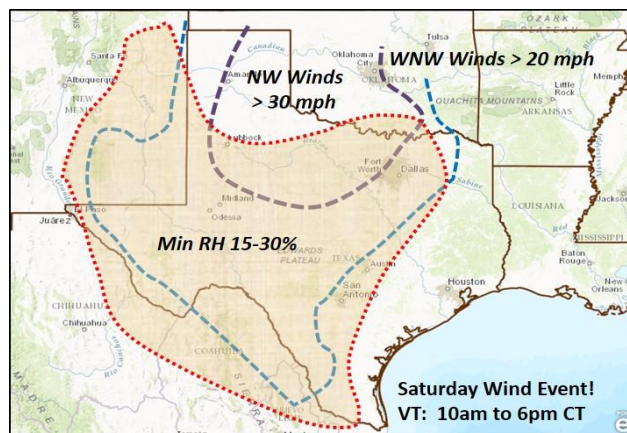
**Sat: Widespread Elevated Fire WX SP to I-35 Corridor, Southward to the RGP and TP; Strong Storms Northeast TX Before Noon; Light Snow Northern Panhandle!**

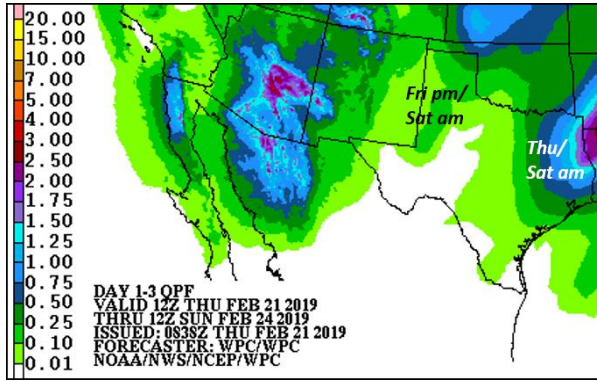
**Impacts:** Fire Weather and Thunderstorm Concerns! A deepening and rapidly departing surface low over the south-central Plains will create a wind machine behind a Pacific cold front due to exit the Gulf Coast by afternoon. Widespread high winds will extend past the I-35 corridor and deep into South TX while humidity values plummet below 30%, leading to a very large area of elevated fire weather. Colder air in the Panhandle will anchor RH values above 30% with light snow accumulations over the northern Panhandle. Finally, a broken line of strong storms will exit Northeast TX by noon but offer locally high winds and hail. The quick storm movement will lessen flooding concerns. Details below:

**Fire Weather:** An extremely large area of west to northwest surface winds exceeding 20 mph will spread immediately behind a Pacific front from east of the Metroplex to the Rio Grande Plains and all points westward. The air mass will carry much lower dew points in the single digits and teens west to 20's further east, thus despite the cooler temperatures, minimum RH values will fall below 30% overlapping the stronger winds. The lowest RH with values of 12-20% will be found from the Pecos River Valley to the Rio Grande Plains (RGP). Near critical fire weather will be found in those locations intermittently during the afternoon. Colder air over the Panhandle and near the Red River should hold RH values above 30%.

**Mitigating factors:** Early morning precipitation from the Panhandle to the western Hill Country and points east will help with a big caveat: rainfall will be very spotty and light south of the eastern Panhandle thus the added moisture will be fleeting. The strongest pressure gradients and winds aloft will exit the state during the afternoon; this will ease winds through late afternoon from southwest to northeast reducing the window of elevated conditions.

**Forecast:** Confidence in a widespread high wind event is high. A high wind watch is already in effect for portions of the Trans-Pecos beginning Friday evening, continuing through Saturday. The dry air accompanying the stronger winds will lead to elevated fire weather over a large area. A far more limited critical fire weather scenario is expected due to the cooler post-frontal temperatures and more limited window of stronger winds intersecting RH near 15% (winds will decrease as RH decreases over southern areas). Thunderstorms will be strong during the morning hours over Northeast TX but move rapidly enough to preclude major flooding.





**Sun: Much Quieter Statewide! Mild, Seasonable Temps.**

Impacts: None. Much lighter winds and seasonable temperatures will rule the day. No rainfall is expected statewide.

Fire Weather: None. Despite the dry air in place over the western HP and TP, sustained southerly wind speeds should remain under 15 mph but with occasionally higher gusts.

Mitigating factors: None.

Forecast: The state can rest from the changeable weather as very pleasant conditions prevail.

**Mon: Much Quieter Statewide! Mild, Seasonable Temps.**

Impacts: Nil. Breezy south winds will blow over the western third, northeast of the TP, while humidity levels improve, generally above 25%. Seasonable temperatures and dry weather will prevail.

Fire Weather: None. South winds will be sustained from 12-20 mph over the HP/ SP but with improving RH, exceeding 25%. Localized areas may observe RH below 20% briefly at peak heating but the required three hour window unlikely is reached.

Mitigating factors: None.

Forecast: Cloud cover will increase over the southern third; otherwise, plenty of sunshine and pleasantly mild temperatures will rule the state with no important weather headlines.

