Texas Fire Potential Update
October 24\textsuperscript{th} – October 30\textsuperscript{th} 2022

Texas A&M Forest Service Predictive Services
Fire Potential Notes

• Initial attack fire potential fire will remain low this week statewide as dead fuel moistures improve from forecast rainfall associated with the passage a cold front Monday and a cold front Friday. Normal to above normal fuel moistures will counter dry and breezy post frontal conditions expected Tuesday. No fire weather is expected across the state this weekend.

• Forecast Energy Release Component trends indicate limited drying potential due to increased frequency of rainfall, cooler temperatures, and shorter days through Sunday. ERC values should trend closer to seasonal averages by the weekend.

• Some isolated locations in the higher terrain of the Trans Pecos and northwest High Plains may observe freezing conditions Monday night that could lead to dormancy in herbaceous fuel. The rest of the state is not expected to experience freezing conditions this week. Recent field observations do show pockets of drought cured herbaceous fuel present in portions Rolling Plains and High Plains.
TAMFS firefighting resources responded to a high volume of IA fires primarily across East and North Texas October 21st-23rd as pre-frontal conditions characterized by temperatures in the upper 80’s, RH values of 30-35%, and winds of 15mph with gusts of 25mph, occurred over dry to critically dry fuel beds. IA fire activity should decrease to low the next 7 days as fuel moistures improve from forecast rainfall associated with two separate cold front passages.
Photos submitted October 18th by Gilbert Dominguez indicate drought cured grasses are present in localized areas where 60 day 25% of normal rainfall deficits are present in portions of the upper Rolling Plains and High Plains. TAMFS responded to 2 IA fires this past weekend in grass dominant fuel in the upper Rolling Plains near Electra where grasses are likely drought cured.
A cold front moving through the state Monday is forecast to produce rain and thunderstorms, with the potential for strong/severe thunderstorms and heavy rainfall for the eastern third of the state.
After Monday, forecast max temperatures will decrease to slightly below normal Tuesday, before warming back to near normal Wednesday and Thursday.
No widespread freeze event is expected this week. Localized areas in Trans Pecos and northwest High Plains may experience freezing temperatures Monday night. Herbaceous fuel may go into dormancy in these regions dependent on the duration of the observed temperatures below 32°F. The National Weather Service has issued freeze watches due to the forecast minimum temperatures.

**Freeze Watch**

Late Tonight into Early Tuesday Morning

Issued October 24, 2022 4:16 AM CT

Freeze Watch across northern Lea County, the Davis and Chinati Mountains, and the Marfa Plateau...

Temperatures
- 29 to 32 degrees

Impacts
- Sensitive plants or crops will be killed or severely damaged if left unprotected

Preparedness Actions
- Outdoor water pipes should be wrapped, drained or allowed to drip slowly.

**Probability for Temperature Below 32 Tonight**

Issued Oct 24, 2022 4:02 AM CDT

- Odds are good that a freeze will occur tonight in the northwest Panhandle.
- Freeze Chances are lower from Hereford to Amarillo to Beaver, but the potential for a freeze still exists.
Dead surface fuel is expected to gain moisture from forecast rainfall Monday/Monday night. The majority of Texas is forecast to have normal to above normal dead fuel moisture Tuesday that will keep IA potential low statewide. Some dry fuel may emerge Wednesday in parts of Central Texas, but IA potential should remain low.

Monday Forecast

Tuesday Forecast

Wednesday Forecast
Despite dry and breezy post-frontal conditions Tuesday, normal to above normal dead fuel moisture will keep IA potential low statewide.
The return of southerly winds Wednesday will begin to modify the dry airmass as Gulf surface moisture begins to move inland. RH values are expected to increase 5-15% Thursday as gulf surface moisture continues to increase.
Forecast ERC trends indicate drying potential will be limited this week due to Monday’s forecast rainfall, cooler temperatures, and shorter days. Rainfall chances are forecast to increase Friday as another cold front is forecast to move through the state. ERC values are forecast to be closer to seasonal averages for the majority of the state by next weekend.
By Friday, another cold front is forecast to move through the state, increasing rainfall chances for the eastern half of Texas. The forecast of additional rainfall Friday will support the continuation of normal to above normal fuel moisture through the weekend, keeping IA potential low for areas along and east of I-35.
The post frontal airmass is expected to produce temperatures 3-8°F below normal Friday and Saturday before warming back to near normal Sunday. Normal to above normal fuel moisture and no widespread forecast fire weather, will keep IA potential low statewide Friday through Saturday.