Texas Fire Potential Update

September 26th – October 2nd 2022

Texas A&M Forest Service Predictive Services
Fire Potential Notes

• **Moderate initial attack activity is forecast Monday for North, Central and East Texas** as strong northwest flow aloft and a tight surface pressure gradient produce northerly winds of 10-15 MPH and relative humidity values fall below 25% behind a cold front that is passing through southeast Texas Monday morning. Wind speeds will moderate Tuesday as high pressure builds back over the state but accelerated rates of drying in surface fuels in the presence of a very dry post-frontal environment will keep initial attack potential moderate in timber litter fuels across the eastern half of the state.

• As Hurricane Ian approaches the Florida coast Wednesday, Thursday and Friday it combines with the high pressure ridging over Texas to bring a dry northeast flow into East Texas. After several days of drying in the very dry post-frontal environment, widespread critically dry surface fuels will be exposed to northeast wind speeds of 10-15 MPH resulting in **high initial attack potential and low to moderate significant fire potential for the Western Pineywoods, Central and Southeast Texas**. Moderate initial attack potential will persist for the rest of the eastern half of the state through the weekend as widespread critically to extremely dry fuels expand, but wind speeds generally remain under 10 MPH.

• **Low initial attack potential is forecast for the High Plains this weekend** where cured grasses in areas with less than 25% of normal rainfall over the past 30 days combine with relative humidity less than 20% and south to southwest winds of 12-18 MPH.
Initial attack activity has been steadily increasing over the past two weeks as the persistent lack of rain and high temperatures slowly dried out surface fuels. A warm and extremely dry pattern this week will lead to accelerated drying in surface fuels. With the expansion of critically dry fuels across the eastern half of the state, initial attack activity will likely increase through the weekend.

September 1st - September 25th 2022 Daily TAMFS Wildfire Response by Predictive Service Area
Pockets of 30-day rainfall deficits below 50% are emerging in Southeast Texas, the Western Pineywoods and Central Texas with little rainfall observed over the past few weeks. Cured grasses are likely present in areas of North Texas, the Rolling Plains and High Plains where 30-day rainfall deficits less than 25% of normal are present. Rainfall deficits will continue to expand as a ridge of high pressure keeps rain chances low across the state this week.
A cold front moving across southeast Texas Monday morning will bring a very dry airmass over the state this week. Dry air will be reinforced by northeasterly flow Wednesday through Friday when a ridge of high pressure over the western part of the state combines with Hurricane Ian as it makes landfall along the Florida coast. Persistent very dry air will lead to accelerated drying of surface fuels and increased initial attack activity.
A week of accelerated drying is represented in the forecast ERC charts where the Southeast Texas and Western Pineywoods PSAs are forecast to approach the critical 97th percentile by the weekend. Widespread critically to extremely dry fuels will likely cover the eastern half of the state by the end of the week.

**SOUTHEAST TEXAS Predictive Service Area**
2001-2022

**WESTERN PINEWOODS Predictive Service Area**
2001-2022

1 Day Periods

Fuel Model: G
7978 Wx Observations
Generated on 09/26/2022-00:45

1 Day Periods

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Moderate initial attack activity is forecast Monday for North, Central and East Texas as strong northwest flow aloft and a tight surface pressure gradient produce northerly winds of 10-15 MPH and relative humidity values fall below 25%.
Poor overnight recoveries in the dry post-frontal environment across the eastern half of the state will also contribute to the accelerated drying of surface fuels. The effects of poor overnight recoveries are represented by the 10-hour fuel moisture maps where 10-hour fuel moistures below the 3rd percentile are present. East Texas overnight recoveries are forecast to be as low as 50-60% for multiple days.
Wind speeds will moderate Tuesday as high pressure builds back over the state but accelerated rates of drying in surface fuels in the presence of a very dry post-frontal environment will keep initial attack potential moderate in timber litter fuels across the eastern half of the state.
Wednesday through Friday wind speeds are forecast to increase to 10-15 MPH out of the northeast. Increased wind speeds combined with widespread critically dry fuels from several days of accelerated drying will result in high initial attack activity for the Western Pineywoods, Central and Southeast Texas.
Low to moderate significant fire potential is forecast for high-risk Pine/Yaupon fuels in the Western Pineywoods, Central and Southeast Texas Wednesday through Friday as critically to extremely dry surface fuels are exposed to 10-15 MPH wind speeds and a persistent extremely dry airmass. Although live fuel moistures have recovered from their summer fire season lows, some areas remain below normal and when exposed to increased surface fire intensities from critically dry surface fuels an increased resistance to control is likely.
Moderate initial attack potential is forecast to continue through the weekend for the eastern half of the state as winds generally remain under 10 MPH, but widespread critically to extremely dry fuels continue to expand.
• Low initial attack potential is forecast for the High Plains this weekend where cured grasses in areas with less than 25% of normal rainfall over the past 30 days combine with relative humidity less than 20% and south to southwest winds of 12-18 MPH.