FIRE BEHAVIOR FORECAST

FORECAST NUMBER: 2	**TYPE OF FIRE: Wildland**
FIRE NAME: Riley Road Fire	**OPERATIONAL PERIOD: 09/10/2011 Day/Night**
DATE ISSUED: 09/9/2011	**TIME ISSUED: 17:00**
UNIT: Texas Forest Service	**SIGNED: /s/ Craig Carter FBAN**

INPUTS

FUEL ASSUMPTIONS: The major fuel type found in the **Riley Road Fire** and Initial Attack area is fuel model TU3 (moderate timber understory). This is the predominant fuel type being used for this forecast. Modeled fire behavior reflects very low fuel moistures: Model Input***:*** 1 hour 3%, 10 hour 6%, 100 hour 12%.

WEATHER SUMMARY

See fire weather forecast for detailed information.

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A ridge of dry high pressure will again dominate most of Texas today. . Low RH's of 13-17% range can be expected over all. Most areas can expect 5 to 10 mph winds with gust of 15. High temps will be 85-95. Poor RH recovery. Expect RH recovery to begin around 22:00 and be gone by 10:00 hours. No rain expected through midweek.

FIRE BEHAVIOR OUTPUTS

General: **Expect EXTREME fire behavior in any canopied fuels, Oak, Pine or Brush when winds 10 mph or greater.** Fuels, both dead and live, remain at critical levels. Foliar moisture in Oak and Pine is extremely low, expect these fires to move into the crowns with ease. With consistently high PIG's spotting will be very problematic. Mop-up and or direct line is very important to keep the fire from escaping the control lines. Large dead fuels will continue to burn for extended periods and will burn deep underground. Expect peak burning period to lengthen with poor humidity recovery and sustained winds, 1300-2100 hours, much later in pine timber fuel types. Fires will burn actively all night in heavier fuels. Transition from surface fire in fine fuels to torching and running crown fire in canopied fuels is certain with winds greater than 15mph. ***New fire starts and spot fires will grow rapidly and be difficult to control if sustained winds are > 15 mph.***

Spotting Distance: West= 0.4 mi, East= 0.3 mi.
Probability Ignition: 88%
Critical fire behavior thresholds *for pine/hardwood mixed timber* ***(temp >90°, RH < 35%, winds > 10 mph).***

SPECIFIC:

Critical Fire Wx thresholds remain. Surface rates of spread are **EXTREME** at 8-31 chain/hour. Fire intensities are high with flame lengths in the 4-10 ft range. Fires will easily move into the crowns in the prime burn period. Fuel moistures in the larger fuels are very low and need to be aggressively mopped up, catch-outs are occurring with regularity. High risk fuels include pine plantations and southern rough brush with yaupon underneath a mature pine canopy. Crown Fire ROS over 80 ch/hr, Flame Length=50+ ft. Cured grass and pine needles and leaves facilitate fire spread between stands of timber. Spotting will remain an issue

AIR OPERATIONS: Gusty winds may affect operations in the PM.

FIRE BEHAVIOR SAFETY

Situational Awareness:

- *Spotting distances of up to 0.6 mi and 0.3 mi. Detection is very difficult in brushy or tree covered flat terrain.*
- *Spotting is prolific when PIG's are above 90%.*
- *Live fuel moistures are extremely low. In brush and timber fuels torching is almost guaranteed, crowning runs are highly likely with winds above 15 mph.*
- *Mop up must be aggressive and thorough, large fuels and soil organics are holding fire. Many fires have re-kindled days after control.*