TEXAS FOREST SERVICE
The Texas A&M University System

Winter 2011 Wildland Fire Season Outlook for Texas

September 24, 2010

There are several factors leading to an elevated concern for the potential severity of the upcoming winter fire season. These include: the presence of La Niña conditions in the tropical Pacific, a strong pattern of Pacific Northwest troughs swinging out over the plains, and above normal grass fuel loadings. Ron McQueen, National Weather Service Fire Weather Forecaster from the Lubbock Region sent the following alert to other fire weather forecasters in the northern and western regions of the state:

> Several factors point to the possibility of an early and active fire weather season coming up across the Southern Plains.
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> - La Niña conditions appear well established with current weather circulations already consistent with La Niña. This favors above normal chances for a warm and dry fall-winter-spring over the Southern Plains.
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> - A pattern of strong Pacific Northwest troughs occasionally swinging out across the northern Rockies/Plains already is established. It is inevitable that we will see a number of dry, warm, and windy days developing in the coming few weeks and months.

Brad Smith, Fuels Analyst with the Texas Forest Service completed an inspection of the grass fuel loading over the northern and western parts of the state, and files the following report.

> The Plains of Texas are currently supporting an above average amount of fine fuel loading due to the rainfall that occurred during the first four months of this year and the above average rainfall associated with the four tropical systems that impacted Texas this summer. The late summer rainfall particularly, is causing a flush of growth in grasses across the Plains of Texas. The resultant increase in fine fuel loading from this growth is more likely to remain through the winter because livestock grazing time is reduced.
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> Increased fine fuel loading across the Plains of Texas can translate to a more active and problematic winter fire season. The increased loading provides a continuous coverage of grass across the surface that makes it easier for fires to spread even with low to moderate wind speed. Normal or below normal fine fuel loading is more broken or patchy and would require increased wind speeds to carry the fire. Fire intensities can also be expected to increase with above normal loading, and exhibit a higher resistance to control requiring additional resources for effective containment.

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Given the implications of above average fine fuel loading and the potential increase in fire intensities it can generate, there is a heightened concern due to its presence in densely populated areas along the I-35 corridor and in north central Texas. An additional risk for north central Texas in a La Niña year is the possibility of a south plains outbreak weather event which was the weather pattern that produced the wildfire outbreak in north central Texas on April 9th, 2009.

Though winter 2011 is still a few months away, warning signs such as those mentioned above, are pointing towards the likelihood of an active winter fire season. It is still just a concern at this point, and weather forecasts can change. But considering the active fire seasons that resulted from the La Niña winters of 2006, 2008, and 2009, it is likely that 2011 will be more like those years than not.

It is recommended that the monitoring of critical fire danger and fire weather thresholds be conducted on a regular basis as we progress towards the coming winter fire season. These products can be accessed via the Predictive Services Web Page at: http://ticc.tamu.edu/index.html .

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