

## SOUTHERN FIRE BEHAVIOR OUTLOOK

<b>FORECAST VALID FOR: August 21, 2011</b>	<b>DATE/TIME ISSUED: August 21/0930</b>
<b>NEXT UPDATE: August 22, 2011</b>	<b>SIGNED: <i>Warren Appelhans</i></b>

\*This is a general fire behavior outlook for the Southern Geographic Area. It is intended to provide wildland fire managers with an overall view of fire behavior potential and to assist wildland firefighters with making sound decisions and maintaining situational awareness based on current and expected fire behavior. This outlook is not intended to replace onsite observations or spot weather forecasts issued by the National Weather Service.

Some products provided in the outlook often are not updated prior to posting. Refer to updated information on the Southern Area Coordination Center Website as it becomes available:  
<http://gacc.nifc.gov/sacc/index.htm>

### Fire Weather Summary:

**\*\*\*Red Flag Warnings/Fire Weather Watches and Advisories\*\*\***

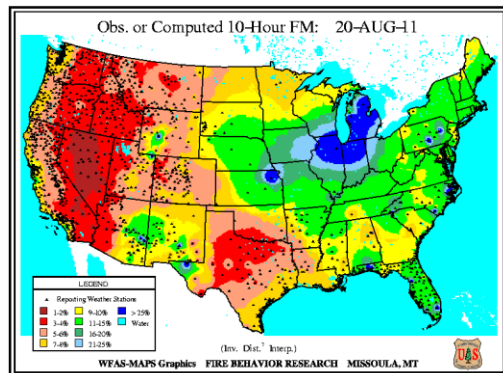
There are no Red Flag Warnings/Fire Weather Watches issued at this time.

- For complete fire weather information and specific detailed forecasts see:  
<http://www.weather.gov>
- Refer to the MesoWest Regional Surface Maps to access weather observations.  
<http://mesowest.utah.edu/index.html>
- For updated fire danger and fuel moisture values link to:  
<http://wfas.net/>

### Fuels Conditions:

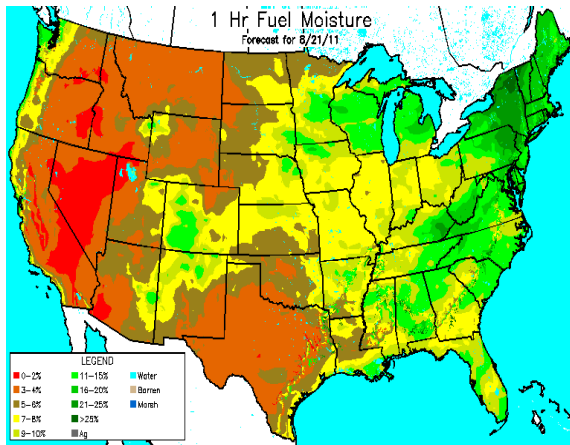
**State of the Fuels will be updated weekly or as the conditions warrant.**

Observed 10 Hr FM Saturday August 20, 2011

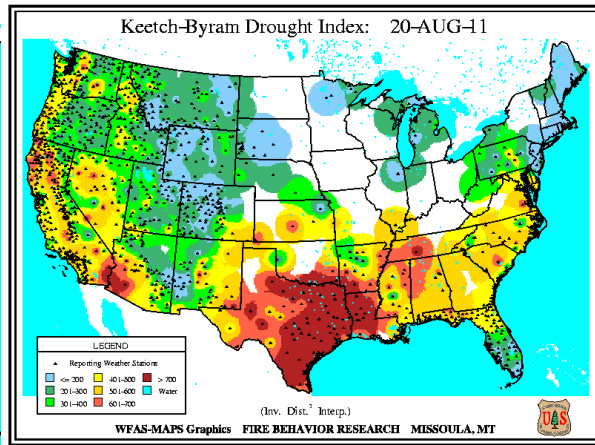


The 10 hour fuel moistures are decreasing with the higher temperatures and lower day time relative humidities. Fires are becoming more resistant to control. Lower fuel moistures in the 100 and 1000 hours it is taking longer to control the fires and extinguish the residual heat in the larger fuels. In many areas the larger down fuel are consuming to white ash.

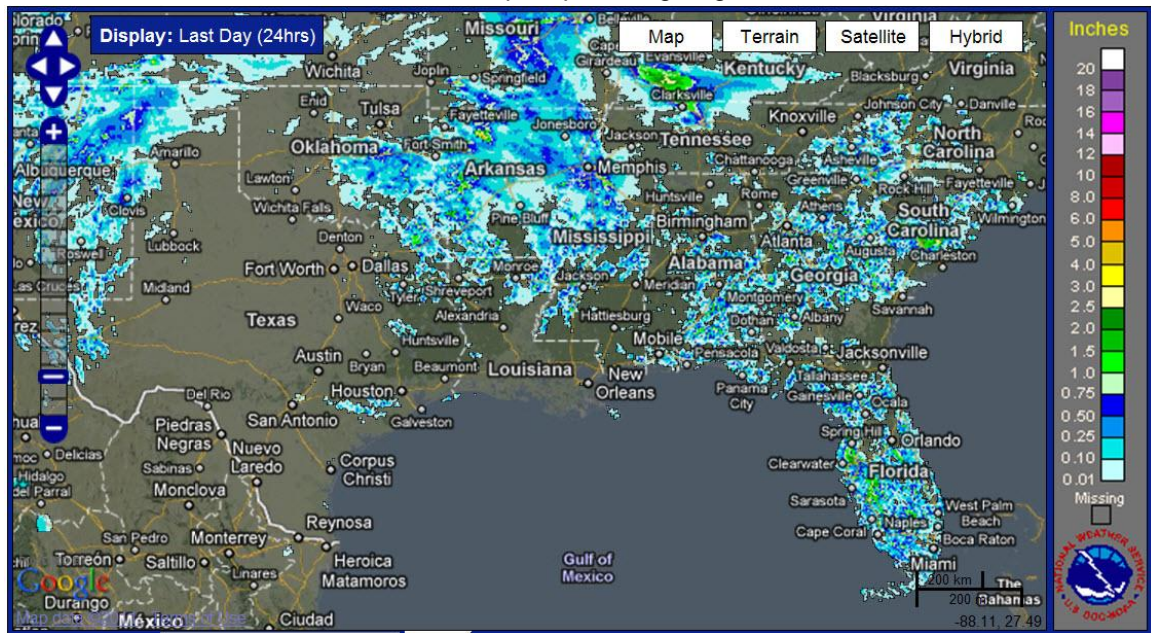
WFAS—10 Hour Forecast Fuel Moisture



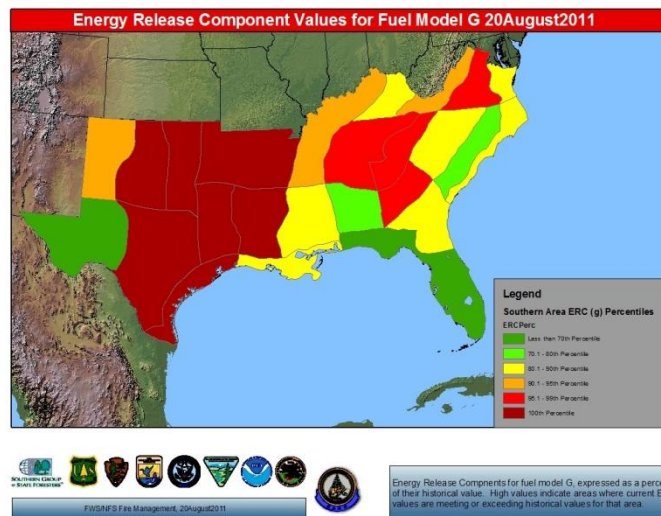
WFAS — KDBI



Southern Area 2 – 24 hour precip, ending August 21, 2011 @ 06:47



Southern Area ERC-G Summary Ending Aug 20, 2011



## Fire Behavior Outlook

Base all actions on current and expected behavior of the fire. Change in wind direction could cause a flanking fire to become a head fire.

### **Boundary area of Arkansas, Louisiana, and Texas and Central Texas**

**Very High** probability of large fire growth. Fires can be fuel and or terrain driven with low wind speeds. Fine fuel moistures continue to be extremely dry. Low RH recovery you could see fires become more active earlier in the day. Any new starts have the potential to become a large fire with light winds. Winds from thunderstorms could pose control problems.

### **Southwest Arkansas, Northwest Louisiana Southern Oklahoma and Texas**

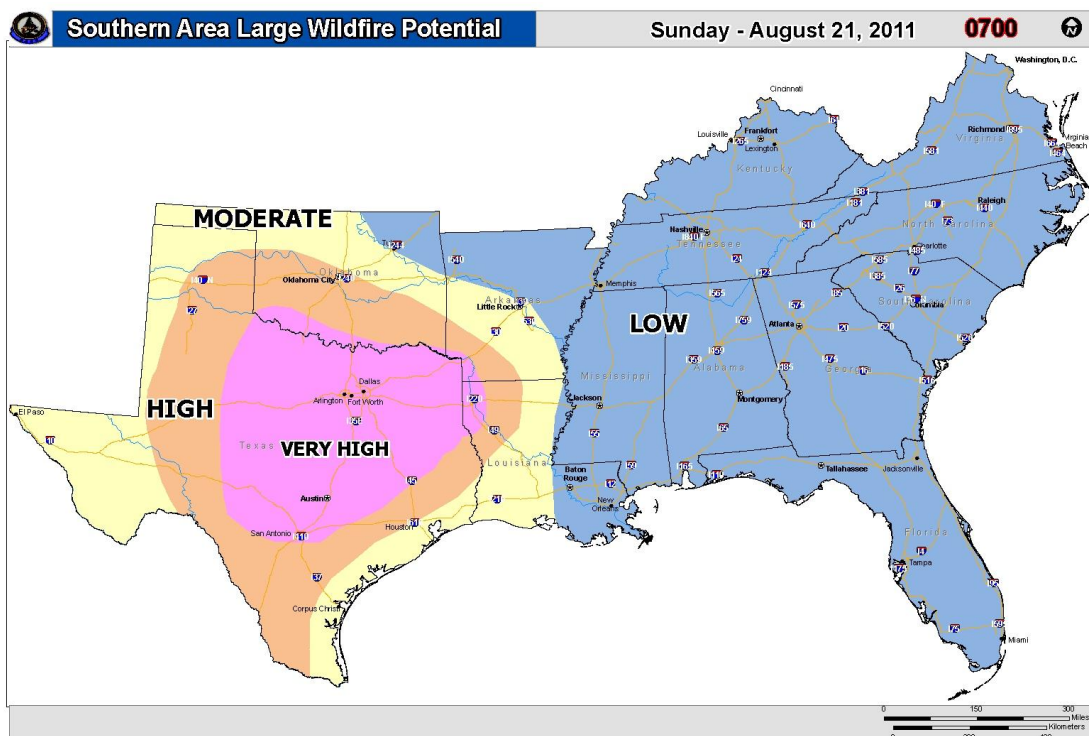
**High** probability of large fire growth. High temperatures combined with low relative humidity and low fine fuel moisture any new starts have the potential to become a large fire with light wind speeds. Low fuel moistures in the larger fuels could increase the intensity of any fires in areas with large ground fuels. Expect to see high rates of spread influence from thunderstorms.

### **Arkansas, Louisiana and Inland Coastal, West Oklahoma and West Texas**

**Moderate** probability of large fire growth. High temperatures combined with low relative humidity and low fine fuel moisture any new starts have the potential to become a large fire. Moderate fire behavior can be expected today in areas that did not receive moisture from any recent rains. Fine fuel moistures are up from the rain and some areas have had good RH recovery overnight.

### **Coastal Region of Texas, East Louisiana, North Arkansas, Northeast Oklahoma, and Geographic Area East of the Mississippi**

**Low** fire behavior expected. These areas have received precipitation as the number of days since the last rain continues to increase ERCs and KBDI values. The good RH recovery over night will help increase the fine fuel moistures. Ignitions may become established but should not spread rapidly.



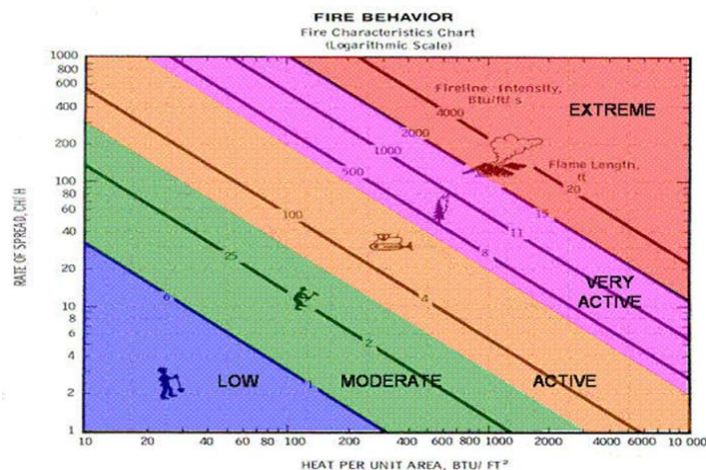
This product is intended to depict **GENERAL** fire behavior potential in the Southern Area. Information summarized from various sources applicable to the geographic area scale and is not intended to provide site specific fire behavior conditions. Individual fire behavior forecasts using fuels, weather and topography must be used for specific incidents.

**FIRE BEHAVIOR INTERPRETATION:**

Visual assessment of active flame length and evaluation of potential effectiveness of various resources and capabilities. The implications of observed or expected fire behavior are critical components of suppression strategies and tactics, in particular terms of determining resistance to control, effectiveness and safety of various resources.

FIRE BEHAVIOR ADJECTIVE RATING	FLAME LENGTH (FEET)	INTERPRETATION FOR FIRE MANAGEMENT
LOW	0-4	Generally attack at the head or flanks are successful, handline should hold fire with very little resistant to control.
MODERATE	4-8	Fire is too intense for direct attack at the head. Handline cannot be relied upon, additional support from engine, dozer, tractor plow or air support is needed.
HIGH	8-11	Fire can present control problems; torching, crowning and spotting can be expected. Control efforts at head of fire are often ineffective.
VERY HIGH	11+	Crown runs, intense surface burning and spotting are common; control efforts at head are ineffective.
EXTREME		Although uncommon, can best be described as erratic fire behavior that goes beyond human methods of control or prediction. Rare events such as well developed and sustained fire whirls, independent crowning and plume dominated fire growth.

The Hauling Chart is an excellent tool for measuring safety and potential effectiveness of fireline resources. Additionally, the Hauling Chart is also a useful tool to help firefighters get a perspective on the relative difficulty of constructing and holding a control line as affected by resistance to line construction by fire behavior.



**Outlook:**

Frontal passage over a fire could see a switch in wind direction. West could see increased fire behavior and large fire potential rise as the high temperatures and low relative humidities continue to dominate the areas. East could see some moderation in the 1 hour fuel moistures with the good overnight humidity recoveries. Fires that get established in large fuels and dry soils will prolong incident duration.

Stay updated by viewing the Southern area 7 day Significant Fire Potential product: [http://gacc.nifc.gov/sacc/predictive/outlooks/Fire\\_Potential.htm](http://gacc.nifc.gov/sacc/predictive/outlooks/Fire_Potential.htm)  
 Longer range outlooks reference the Climate Prediction Center link:

