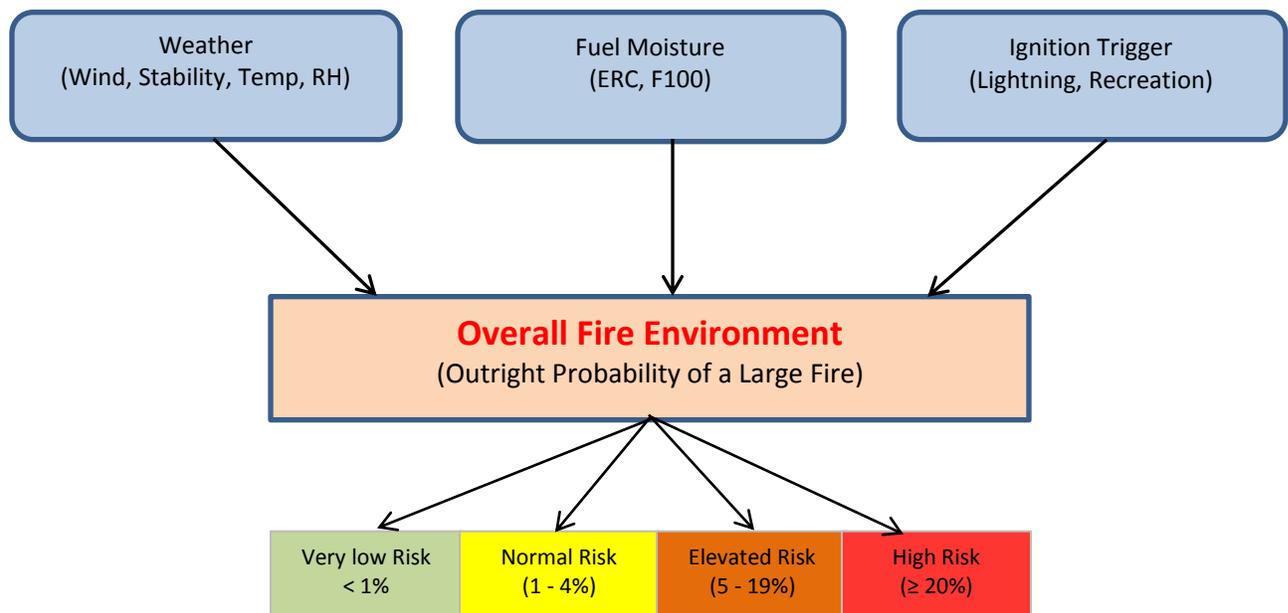


# EXPLANATION OF THE 7-DAY SIGNIFICANT FIRE POTENTIAL PRODUCT

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## Fire Activity & Large Fire Potential

It is important to understand that the intent of this product is to provide guidance information regarding expected fire activity on a regional level to support regional and national level resource decisions. The product is a forecast of the daily probability for a Large Fire on each of the next 7 days for 12 forecast zones (PSAs) in the region. A Large Fire is meant to be one that would likely require a Type 1 or 2 IMT deployment. *This product is NOT a weather forecast* and, importantly, it also is *NOT a fire behavior forecast* and therefore not an appropriate product for determining tactics on individual fires. The following diagram outlines the components of our model and indicates the large fire probability thresholds for 4 Fire Potential levels (green-yellow-brown-red).



Our Large Fire probability forecasts are objective, generated via statistical models that incorporate elements shown in blue in the above diagram.

## Model Characteristics

The probability of a large fire on any particular fire season day tends to be is a very low, averaging only 1% to 3% depending on the PSA. That is reflected in our model's large fire probabilities. Our **green** and **yellow** risk categories (0-4%) will predominate while **brown** and **red** category days will be far less frequent. Our model tends to forecast higher probability levels

(**brown** and **red** categories) only on about 10% of days, depending on the particular PSA. However, 50% to 70% of large fires occur on those days. You can expect to see very few **brown** and **red** days unless lightning is involved. That is because the occurrence of human-caused large fires shows only a marginal relationship to burning conditions. Consequently, a majority of large human-caused fires will unfortunately occur at **yellow** and even **green** levels. Occasionally we may issue a “High Risk” **red** day if a large fire is already in progress and we think burning conditions are critical enough to support significant growth potential. These are normally subjective calls on the part of the forecaster as we have no objective forecast models for forecasting fire growth.

For interpreting this product I think that it is important for field units to remember that this product is geared primarily toward regional and national level concerns and may not necessarily reflect all of your local concerns. For instance, when we issue a High Risk alert (**red** fire level), we essentially are suggesting to regional and national level resource managers that they might want to consider initiating proactive resource decisions, with inherent cost, in order to prepare for a potentially significant fire event.