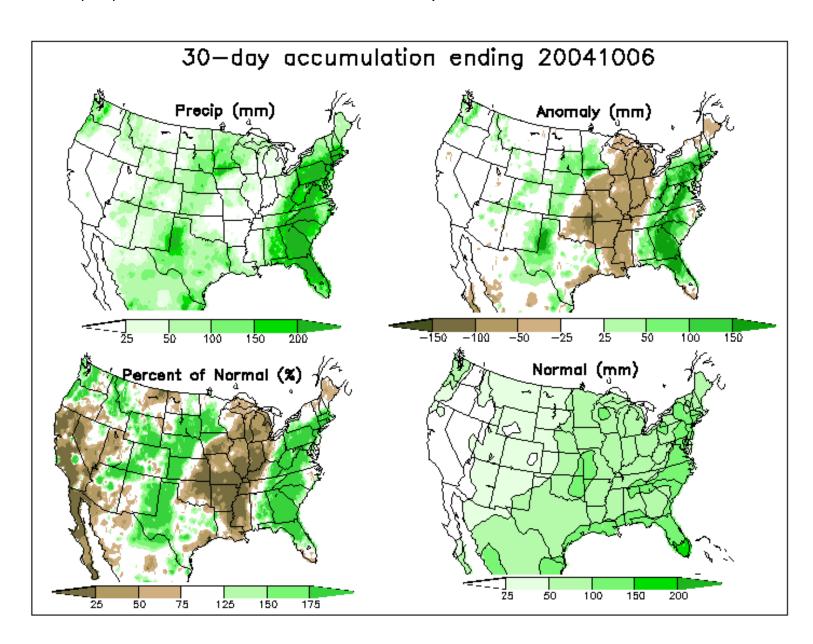
Eastern Area October 2004 Fire Weather/Fire Danger Outlook

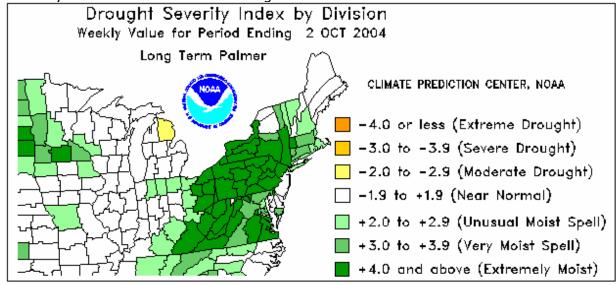
The following outlook was made with the most recent weather and climate data available at the beginning of October 2004. It is a general report intended to provide fire management personnel with an area wide outlook for October 2004. Due to the variability in the data and weather computer model limitations beyond two weeks, it is important for the local fire manager to know their own area of responsibility and to base their actions on those conditions.

The graphics below display historical accumulated precipitation data over the 30 days through October 6, 2004. Below each graphic is a key displaying the color corresponding to precipitation amounts in millimeters 25.4mm=1.0 inch).

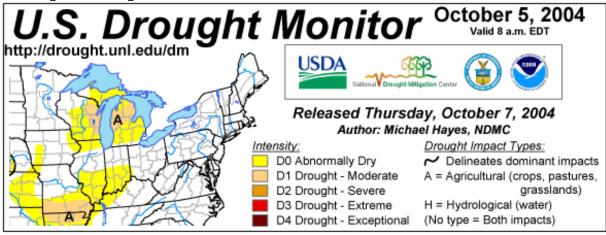


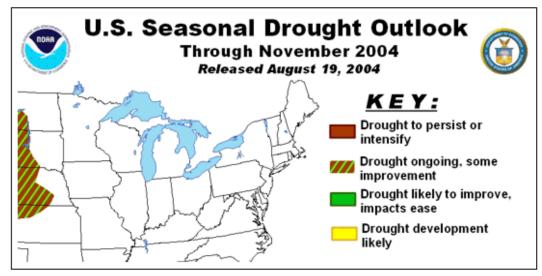
Drought Indicator and Outlook

The long term Palmer Drought Severity Index through October 2, 2004 is displayed below. Areas colored yellow indicate a moderate drought state.

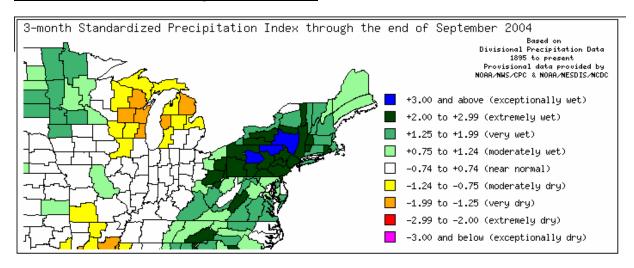


The U.S. Drought Monitor ending October 5, 2004 is displayed below. The following colors correspond to increasing drought severity: Yellow=abnormally dry or in a drought state zero; Tan=moderate drought state of 1; Brown=severe drought state 2; Reddish brown=extreme drought state=3. The graphic displayed at the bottom of the page displays the U.S. Drought Outlook for the Eastern Area. The areas shaded in green indicate areas forecast for improvement to the long-term drought.



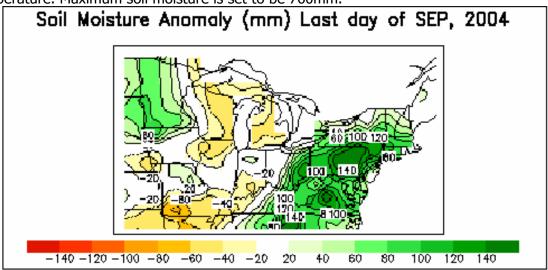


3 Month Standard Precipitation Index

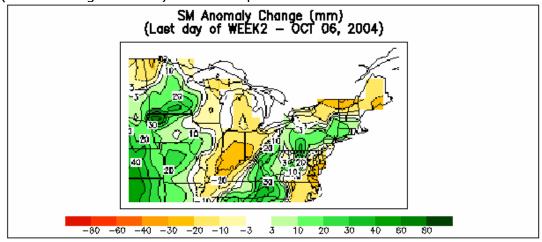


Soil Moisture Anomalies and Outlook

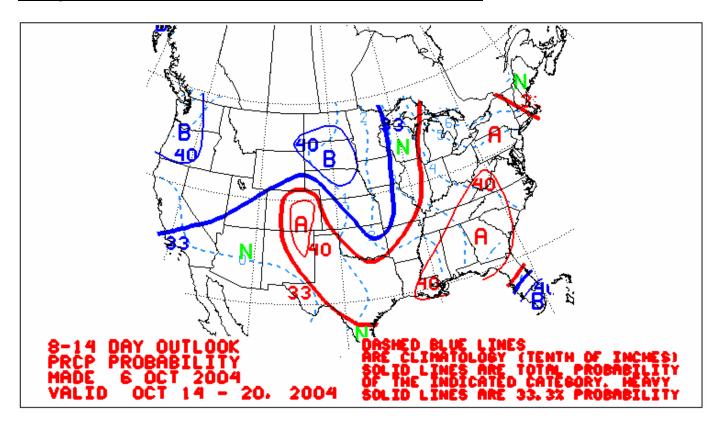
The graphic below displays **soil moisture anomalies** in mm through the 30 days leading up to September 30, 2004. Soil moisture is estimated in mm by a one-layer hydrological model (<u>Huang et al., 1996</u>). The model takes observed precipitation and temperature and calculates soil moisture, evaporation and runoff. The potential evaporation is estimated from observed temperature. Maximum soil moisture is set to be 760mm.



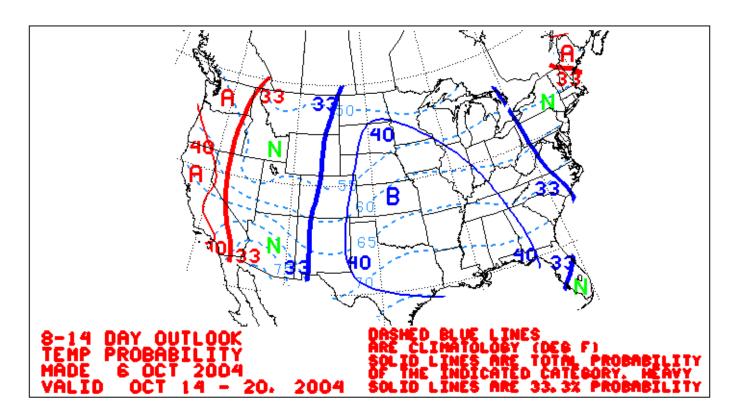
The graphic below displays the **forecast soil moisture change** (in mm) over the period from October 13, 2004 to October 20, 2004. These projections are based on output from the MRF (Medium Range Forecast) or GFS computer model.



Precipitation Outlook Valid October 14 - October 20, 2004

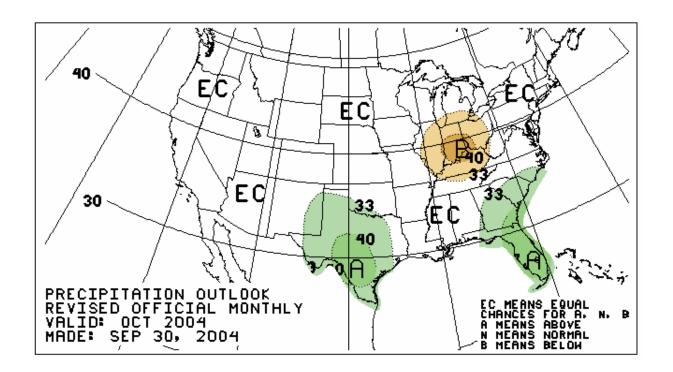


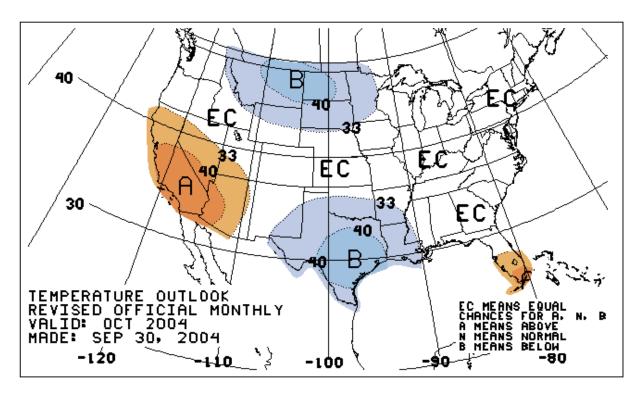
Temperature Outlook Valid October 14 - October 20, 2004



<u>Climate Prediction Center's October 2004 Precipitation and Temperature</u> Outlooks

(B=Below Normal, A=Above Normal) (CL=Equal Chance of being above or below)





Narrative

POTENTIAL FOR SERIOUS/CRITICAL FIRE PROBLEMS

THIS COMING MONTH	BELOW NORMAL	AREAS	NORMAL	ABOVE NORMAL	AREAS
THIS SEASON	BELOW NORMAL	Eastern 3/4 of Mid- Atlantic, Western Northeast States	NORMAL	ABOVE NORMAL	Portions of Central and eastern Great Lakes, Southwest into south central Big Rivers

FIRE WEATHER OUTLOOK (To address the following factors)

DROUGHT CONDITIONS: 30 and 90 Day negative precipitation anomalies have developed across parts of eastern Wisconsin, the northern half of the Lower Peninsula and eastern parts of the Upper Peninsulas of Michigan. 30 Day negative anomalies were in place at the end of September over the southern third of Missouri eastward into southern Illinois and far southern Indiana. Some of these negative precipitation anomalies were reflected in above normal drought levels on the U.S. Drought Monitor at the end of September. Negative soil moisture anomalies were also in place across the above mentioned areas. Positive precipitation anomalies persisted over much of the Mid-Atlantic and western Northeast states as the remnants of the numerous tropical systems which affected the Southern Area made their way northeastward through these areas. Long Term Palmer Drought Indices through September were well below normal. Positive

Soil moisture anomalies were also displayed across much of the eastern U.S.

PRECIPITATION ANOMALIES AND OUTLOOK: 33 to 40 percent chance of below normal precipitation across the eastern Big Rivers, far southeastern Great Lakes, and western Mid-Atlantic states. Equal chances of above or below normal precipitation across remainder of the Eastern Area.

TEMPERATURE ANOMALIES AND OUTLOOK: 33 to 40 percent chance of below normal temperatures over much of Minnesota. There is an equal chance of above or below normal temperatures over the remainder of the Eastern Area.

FUELS

FINE - GRASS STAGE	GREEN	X	Pregreen	FROZEN	
NEW GROWTH	SPARSE	X	NORMAL	ABOVE NORMAL	

LIVE FUEL MOISTURE (sage, deciduous, conifer):

1000 HOUR DEAD FUEL MOISTURE: 14 to 19% parts of NE WI, Eastern parts of the UP of MI, Northern half of the LP of MI, Southern third of MO, Southern IL, and far southern IN, 19 to 25% rest of EA

WRITTEN SUMMARY:

Above normal fire potential is forecast for the month of October across portions of northeast and eastern Wisconsin, eastern parts of the UP of Michigan, the northern half of the LP of Michigan, and southern portions of Missouri, Illinois and Indiana. 30 and 90 day precipitation anomalies were below normal over these areas at the end of September. In addition, short term soil moisture anomalies were also below normal. Most of these areas have gone 30 to 45 days without significant precipitation. The Climate Prediction Center has predicted a 33 to 40 percent chance of below normal precipitation across the eastern half of the Big Rivers, western third of the Mid-Atlantic, and far southeastern Great Lakes in October 2004. If these areas do receive less than average precipitation it would lead to increasing drought levels over the southern Big Rivers and this drier than normal area may extend further north into dry regions of the eastern Great Lakes as well. Therefore, these areas are expected to be in above normal fire potential during the month of October.

Below normal fire potential is expected across the eastern three-quarters of the Mid-Atlantic and western two-thirds of the Northeast. The long term Palmer Drought Index continued to show wet conditions in place over the much of the Mid-Atlantic and western portions of the Northeast. Soil moisture anomalies and Standard Precipitation Indices were also well above normal. Heavy rainfall events resulting from the remnants of several tropical storms occurred over these areas through September and this reinforced the long term wet conditions in pace. Therefore, fire potential across these areas will remain below normal during October 2004.

Normal fire potential is forecast across the remainder of the Eastern Area during the month of October 2004.

FIRE POTENTIAL MAP

