

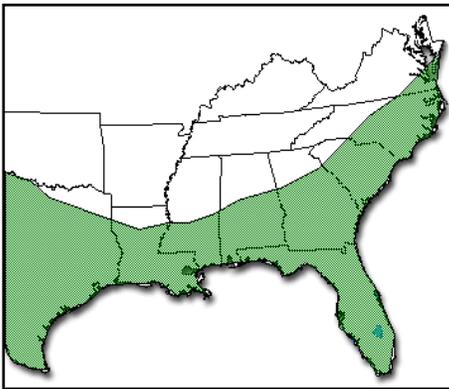
Seasonal Fire Weather/Fire Danger Outlook The Southern Area

A. EXECUTIVE SUMMARY

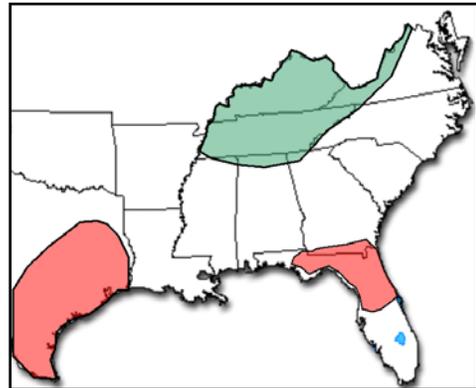
1. **Mar –May:** Overall fire risk during the spring months should remain in the normal to below normal range.

2. **Jun – Aug:** During the summer months, normal to below normal risks are expected for the northern half of the Southern Area while risks for TX and FL will likely transition from normal at the start of the period to above normal by the end of August.

MAM FIRE RISK OUTLOOK



JJA FIRE RISK OUTLOOK



FIRE RISK LEGEND

■ HIGH □ ABOUT NORMAL ■ LOW

3. **Entire Period (March to August):** Fire risks are expected to be at to below normal.

MARCH THROUGH AUGUST FIRE RISK



FIRE RISK LEGEND

■ HIGH □ ABOUT NORMAL ■ LOW

B. CURRENT CONDITIONS.

1. The past much wetter than normal weather conditions over the majority of the Southern Area has and continues dampen fire risk. Although widespread drier than normal conditions existed over the mid-west into OK and AR during January, significant above normal rainfall October to December 2002 and during February 2003 (to date) along with significant snow/ice events in areas of the South have lowered BIs and kept dead fuel moistures elevated (see Figure 1 and 2). Other than the OK area, there was as of late February some minor dryness over SC – but end of February moderate heavy rain events into early March should mitigate this area. As Figure 3 below shows, fire numbers since the start of the wetter than normal trend last fall have been dramatically reduced. We expect this trend to continue through spring as normal to wetter than normal conditions as a result of El Nino continue.

C. CLIMATE AND WEATHER OUTLOOKS.

1. Temperature and Precipitation Forecasts: March through August.

Below are the temperature and precipitation forecasts for the Southern Area from March through August. Two sets of forecasts are provided:

- Consensus three month aggregate temperature and precipitation probability forecasts for March, April, May (MAM) and June, July, August (JJA). These consensus forecasts were developed for GACC Predictive Services use by climatologists

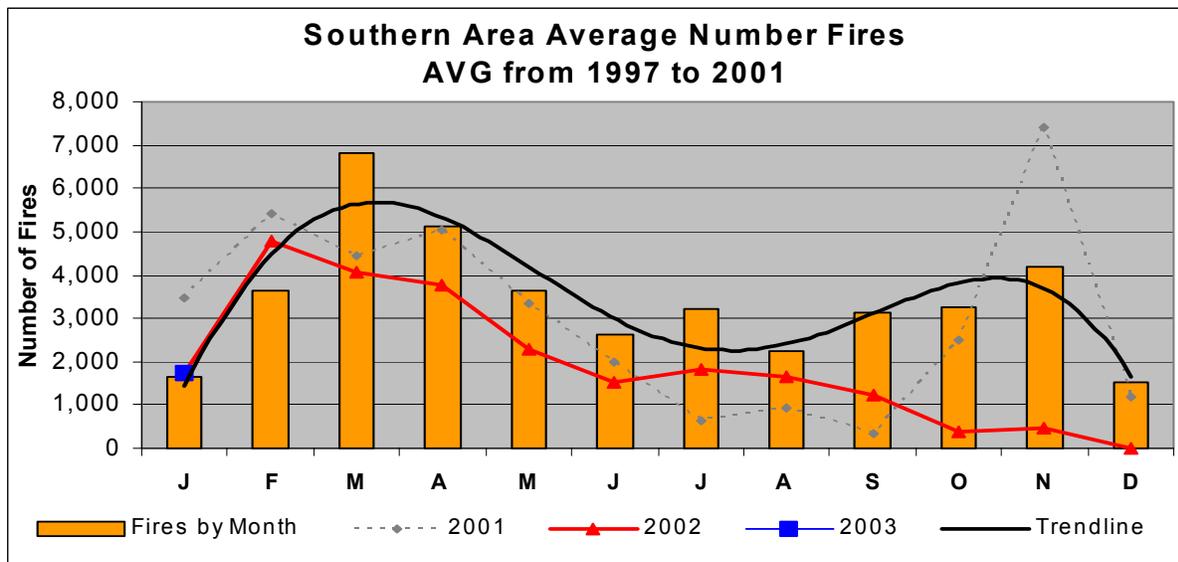


Figure 3
Southern Area Fires Curve

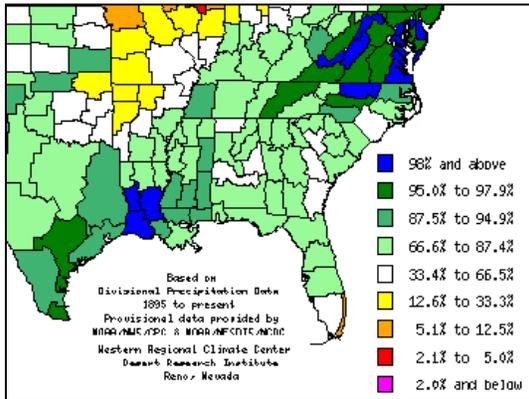


Figure 1
5 Month Precipitation Percentile
(Through February)

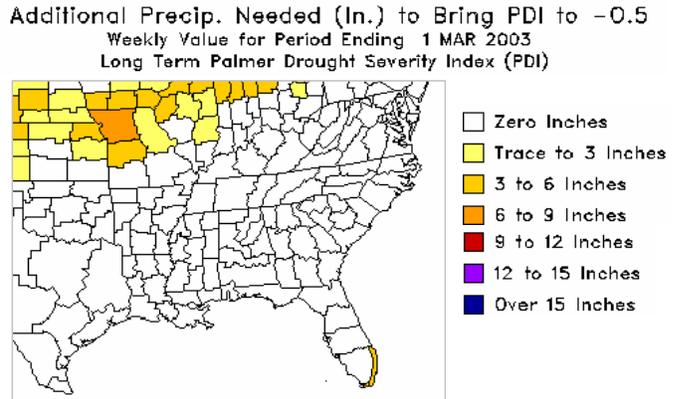
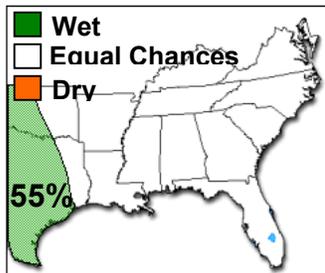
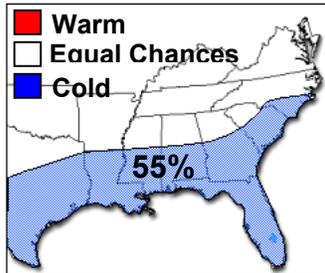


Figure 2
PDI Summary (Through February)

- supporting/within the fire community and derived from CPC, IRI, Scripps, CDC, and DRI outlooks. The consensus forecast's broad forecast period highlights a limiting factor in its use – it provides a view only for the entire period and makes inference of specific anomalies for individual months within the period difficult.
- Month by month temperature and precipitation categorical anomaly forecasts. The monthly forecasts were developed within the Southern Area Predictive Services Unit using a combination of tools and techniques to include: atmospheric oscillations, historical analogs, long term historical weather trends and patterns, National Climatic Forecast Outlooks, knowledge and insight into localized Southern Area weather patterns, and experience. During the Hurricane season from June through November, any forecast drier than normal patterns would generally represent worst case conditions due to the significant impact of tropical storms on precipitation areas. Ideally, the aggregate monthly forecast trends should be in general agreement with the three month consensus forecast. When significant disagreement is suggested, a note will be provided.

**MAM Consensus
Probability Forecasts**

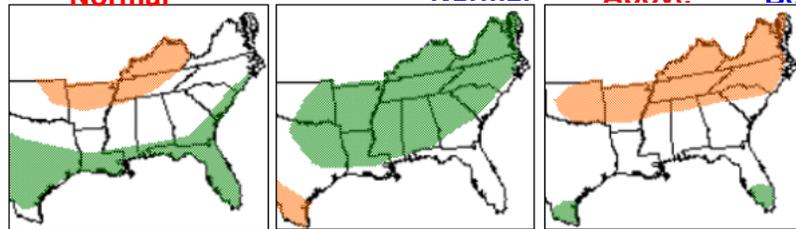
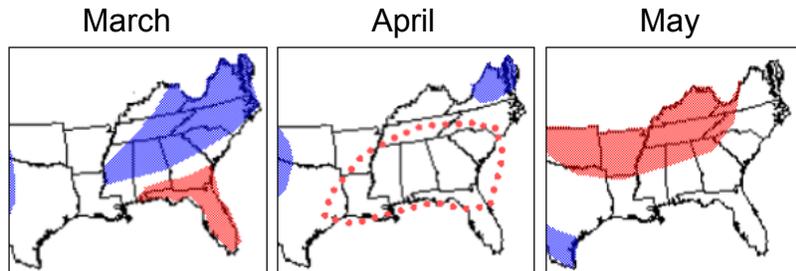
Temperature Category



Precipitation Category

MAM Month by Month Anomaly Forecasts

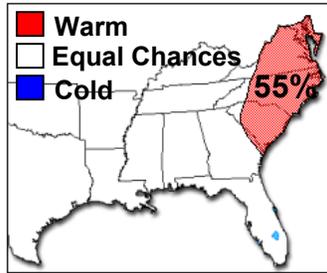
Temperature Anomaly



Precipitation Vs Normal

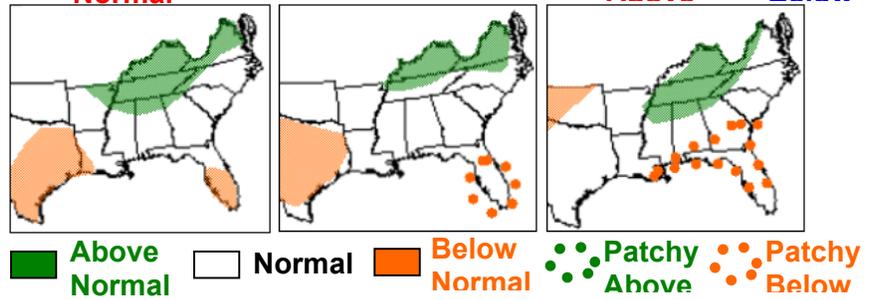
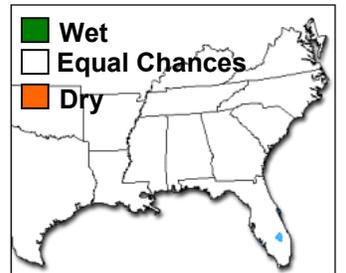
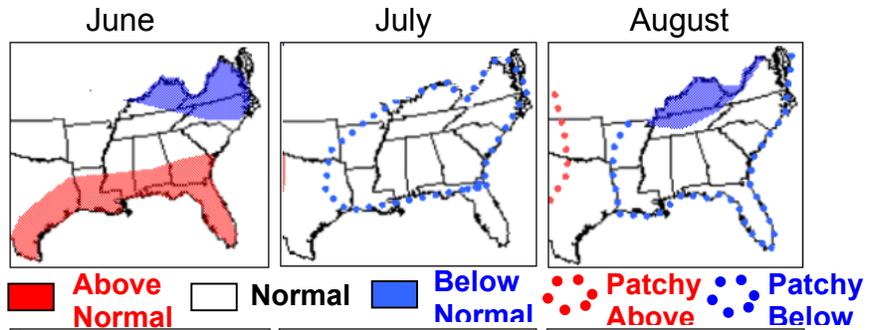
MAM Forecast Notes. In opposition to the consensus forecast for slightly better odds for cooler than normal conditions during the overall three month period in Florida, our analysis indicates a trend for normal to above normal temperatures – especially for March. Since the consensus forecast puts the odds at only 55% colder probability and the trend over Florida as of late February indicated slightly above normal mean temperatures, we feel comfortable in our analysis and forecast.

**JJA Consensus
Probability Forecasts
Temperature Category**



JJA Month by Month Anomaly Forecasts

Temperature Anomaly



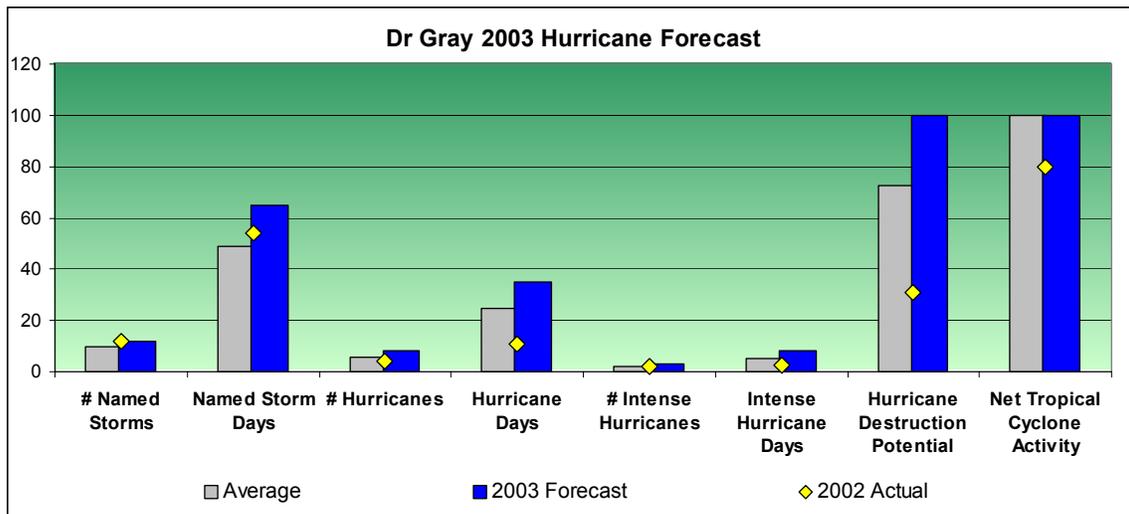
Precipitation Category

Precipitation Vs Normal

JJA Forecast Notes. Another general temperature trend disagreement occurs during the aggregate June through August period over the mid Atlantic region. The monthly forecast suggests a trend for overall seasonal to cooler than normal temperatures. Again, due to the weaker probability forecast of only 55% for warmer than normal conditions, last year's warmer than normal temperatures for the same period, and as a minimum a weaker El Nino (to neutral conditions) index indicating a more seasonal ENSO risk pattern - a normal to cooler than normal temperature trend forecast is not out of line.

2. 2003 Hurricane Forecast.

Dr Gray's (University of Colorado) current forecast is calling for a very active Tropical Storm Season (See chart below). Above average activity is expected for all forecast categories with the most significant anomalies expected for the number of tropical storm days (65 Vs average of 50 **and** much higher than last year's 49) and number of hurricane days. If this verifies with land falling storms, the higher activity levels could reduce the anticipated building of fire risk through the summer over more southern areas of the geographic area.



C. FUELS.

1. Live. Woody fuels are still dormant and will not begin their growth until green-up, possibly around May. The herbaceous fuels currently are either at or above normal moistures for this time of year. We expect the woody and herbaceous values to remain high until the late summer.
2. Dead. The 100 hr and 1000 hr dead fuels are normal to above normal moisture with the majority of the area at all time maximum values for this time of the year. We expect this trend to continue through the assessment period with values starting to decline this summer.
3. Existing Problem areas (Disease, Weather Damage). The southern area has many potential problem fuel areas which are in the inventory process at this time. With the weather conditions expected, these areas do not appear to be a significant concern for this assessment period.
4. Green-Up and Cure. Green-up is expected to be later than normal this year due to the cooler temperatures expecting to last longer than normal. Curing should occur normally or later than normal.

D. FIRE OCCURRENCE AND RESOURCE OUTLOOKS.

CY 2002 ended with the southern area having only 75% normal fire occurrence and only 53% of normal total acres. This was due to The Southern Area not having a typical fall fire season. January 2003 fire occurrence was 114% of normal and 96% of normal acres burned. February 2003 fire occurrence dropped to 45% of normal and 40% of normal acres burned due to cool and moist conditions returning to the area. We expect the number of fires as well as total acres burned to stay below normal for the March through August period. This would mean minimal, if any, additional resource needs.

E. MANAGEMENT IMPLICATIONS AND CONCERNS. None.

F. SUMMARY AND RECOMMENDATIONS.

With expected cooler temperatures and normal to above normal precipitation across the Southern Area through April, fire risks will remain at worst normal with no additional resources needed.