



When Did the Drought Begin?

A Focus on the North Georgia and Atlanta Areas

November 16, 2007

Seasonal precipitation factors that lead to the beginning of the rainfall deficits and drought conditions:

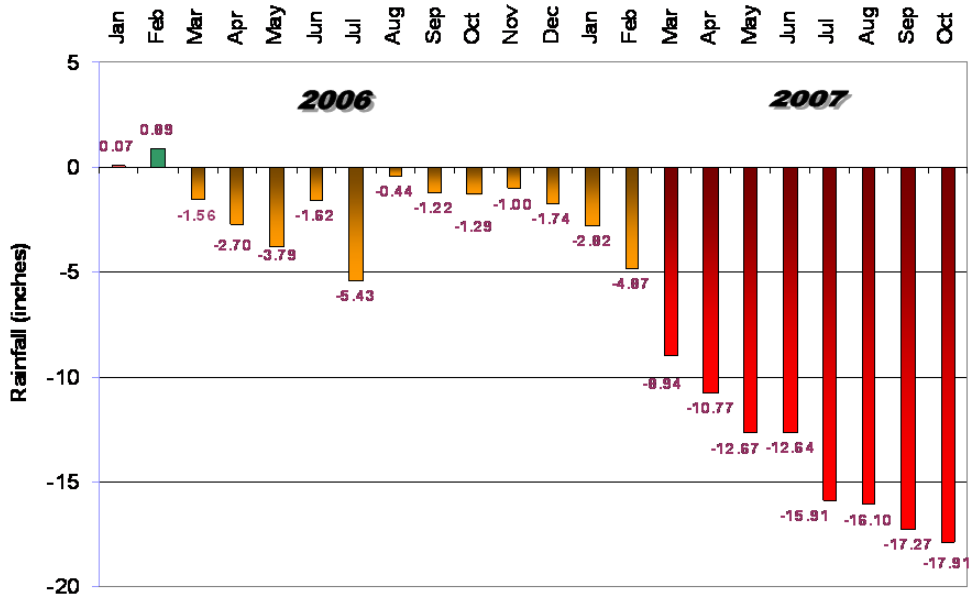
- After a near-normal to slightly above-normal rainfall season in 2005, below normal rainfall in the spring of 2006 began the rainfall deficits.
- Thunderstorms in June 2006 and in the end of August 2006 helped bring some relief to localized areas, such as at the Atlanta (ATL) airport (see Atlanta rainfall versus Climate Division 2), but July 2006 ended with very little rain, making for a dry 2006 summer overall.
- A few rain events during the fall of 2006 helped keep deficits from growing.
- In 2007, the typical wet season from late winter through spring never occurred. Of the close to 22 inches we usually see from January through April in Atlanta, only about half occurred.
- The very dry weather that produced the large rainfall deficits in the spring of 2007 only continued into what was to be a very hot, dry summer. Atlanta reached 104 degrees in late August...the hottest temperature ever recorded at ATL in the month of August and the hottest temperatures since July 1980. Long stretches of hot temperatures and dry conditions increased evaporation rates and water usage across North Georgia, only aggravating continued drought conditions. By early August, parts of North Georgia were in D4 conditions or Exceptional Drought Conditions reported by the National Drought Monitor.
- Hope for rain from a tropical system never materialized as the 2007 tropical season ended as one of the most inactive seasons since 1977 (Center for Ocean-Atmosphere Prediction Studies).

In summary, the severe dry conditions during the late winter through spring period of 2007 aggravated an already dry year of 2006. In addition, relief from summer convection and fall tropical systems never came to fruition. It is this series of continuous typical wet seasons being dry that lead to meteorological droughts of this nature currently observed in north Georgia. Past droughts have shown that dual dry years like this are typical for drought periods.

Investigator: Jeffrey Dobur, Senior Hydrologist

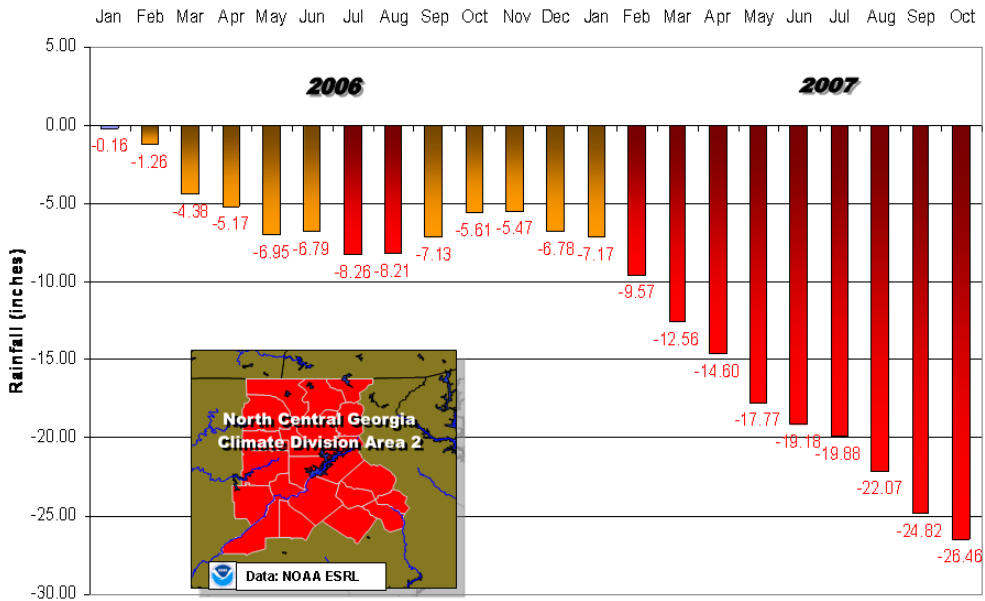


Atlanta Rainfall - Running Surplus/Deficit



North Central Georgia – Climate Division 2

Running Rainfall Surplus/Deficit



Drought Monitor

January 2006 through November 2007



January 3, 2006



February 6, 2006



March 7, 2006



April 4, 2006



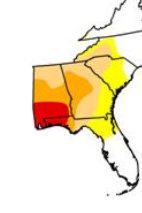
May 2, 2006



June 6, 2006



July 4, 2006



August 1, 2006



September 5, 2006



October 3, 2006



November 7, 2006



December 5, 2006



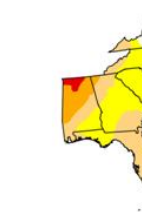
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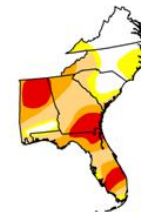
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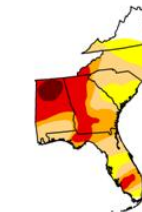
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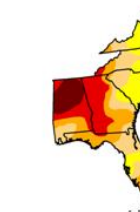
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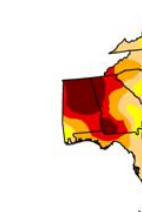
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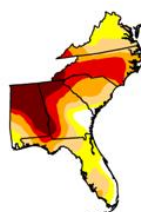
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October 2, 2007



November 6, 2007