Florida is now well entrenched in the summer rainy season. Since June, the summer rains have behaved about like normal. With the Pacific Ocean in neutral phase, there is no forcing that should either enhance or diminish the remainder of the convective rainy season. While the recent rainfall has certainly been welcome, much more is needed to ease the impacts of long-term deficits in most areas of the state, with the exception of the southern tip of the peninsula. In spite of the excess rain in South Florida, Lake Okeechobee remains near historic lows and has been slow to respond.
With the appearance of colder than normal surface temperatures in the eastern tropical Pacific and the greater extent of deeper cool water, while current conditions in the Pacific are primarily neutral, it is as likely as not that a full La Niña will develop sometime this fall. We are now entering the season of the year when La Niña is historically prone to form.
The image above shows where sea surface temperatures are above (red) or below (blue) the long-term average between July 28 to August 4, 2007. The Advanced Microwave Scanning Radiometer (AMSR-E) flying on NASA’s Aqua satellite collected these observations. Characteristic of La Niña conditions, this image shows a predominance of blue near the South American coast, particularly off the coast of Peru. At the time of the August 7, 2007 prediction, NOAA had derived mixed results from its models, with some models predicting a transition to mild La Niña over the next couple months, and other models predicting a continuation of neutral conditions.

If a La Niña does form in the Pacific Ocean in next few months, it is known to increase the likelihood of a warm and dry fall and winter in the Southeast. The last extended drought in the Southeast (1998-2001) was exacerbated by a multi-year La Niña. Should La Niña develop, the first impact would be on hurricane activity during the tropical season. Just as El Niño was responsible for the below-normal activity last year, La Niña is known to create an environment conducive for hurricane formation in the Atlantic Basin. Recent studies have shown that Atlantic storms are a little more prone to curve up the East Coast of the U.S. during La Niña, but all coastal areas are still at an increased risk.

Looking further ahead to winter, in the case of winter vegetables, La Niña yields are generally higher since there is less disease pressure and a lower percentage of culls. Click here for more information about La Niña and winter vegetables in Florida.

If a La Nina does not develop, a neutral phase will take place. The development of an El Niño is highly unlikely. In the case of a neutral phase, we can anticipate a winter season with near normal rainfall but increased risk of damaging freezes in the Florida citrus and winter vegetable belt. For more detailed information on potential climate shifts in your particular county, please refer to the Climate Risk Tool at AgClimate.org: