



**Drought Status and Climate Outlook for Upcoming 12 Months
FWS SFESO – Vero Beach, FL
July 10, 2012**

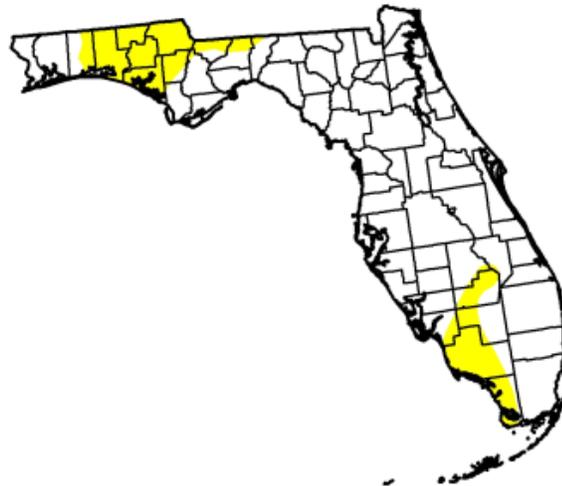
Short Term Drought Map:

U.S. Drought Monitor
Florida

July 3, 2012
Valid 7 a.m. EST

Drought Conditions (Percent Area)

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|---|-------|--------|-------|-------|-------|-------|
| Current | 83.50 | 16.50 | 0.03 | 0.00 | 0.00 | 0.00 |
| Last Week (06/26/2012 map) | 85.45 | 14.55 | 0.04 | 0.00 | 0.00 | 0.00 |
| 3 Months Ago (04/03/2012 map) | 0.00 | 100.00 | 97.81 | 56.44 | 20.31 | 7.42 |
| Start of Calendar Year (12/27/2011 map) | 38.81 | 61.19 | 27.41 | 12.84 | 2.61 | 0.00 |
| Start of Water Year (09/27/2011 map) | 43.12 | 56.88 | 28.83 | 16.85 | 7.85 | 0.00 |
| One Year Ago (06/28/2011 map) | 6.53 | 93.47 | 82.96 | 66.48 | 47.59 | 20.65 |



Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://droughtmonitor.unl.edu>



Released Thursday, July 5, 2012
Rich Tinker, Climate Prediction Center/NOAA

Figure 1 – U.S. Drought Monitor for the State of Florida.

Synopsis: In early June, Tropical Depression Beryl produced rainfall in northern and central Florida of 2-4 inches. In the second week of June, a late season cold front interacted with tropical moisture already in place over the State. This caused flooding as 15-22 inches of rain fell in the Florida Panhandle. Moderate to heavy rains fell across the remainder of the State with 4-10 inches falling in areas that were previously designated as moderate to severe droughts. The 7-day average USGS stream flows ending June 12 showed a large rebound in the volume, with most gauges in Florida at or above normal levels, while the 1-day (June 12) average flow was even

better. Drought improvement occurred in the third week of June in northeast Florida due to more summertime rains following the Gulf Coast deluge from the previous week. Tropical Storm Debby occurred during the last week of June. Debby produced 5-10 inches of rain across the State with up to 23 inches of rain reported in Wakulla County. This rain event coupled with the other events of the month eliminated drought from Florida.

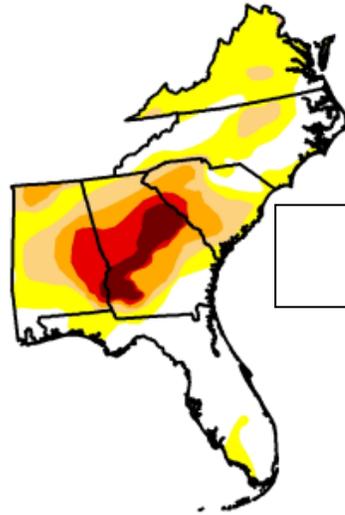
U.S. Drought Monitor

Southeast

July 3, 2012
Valid 7 a.m. EST

Drought Conditions (Percent Area)

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|---|-------|-------|-------|-------|-------|-------|
| Current | 32.32 | 67.68 | 35.46 | 21.27 | 11.01 | 4.29 |
| Last Week (06/26/2012 map) | 43.76 | 56.24 | 27.75 | 17.63 | 9.55 | 4.29 |
| 3 Months Ago (04/03/2012 map) | 22.46 | 77.54 | 58.79 | 36.74 | 20.92 | 3.32 |
| Start of Calendar Year (12/27/2011 map) | 40.38 | 59.62 | 43.05 | 28.62 | 18.71 | 0.00 |
| Start of Water Year (09/27/2011 map) | 42.24 | 57.76 | 41.82 | 31.77 | 23.48 | 0.00 |
| One Year Ago (06/28/2011 map) | 15.61 | 84.39 | 62.63 | 44.22 | 29.11 | 14.73 |



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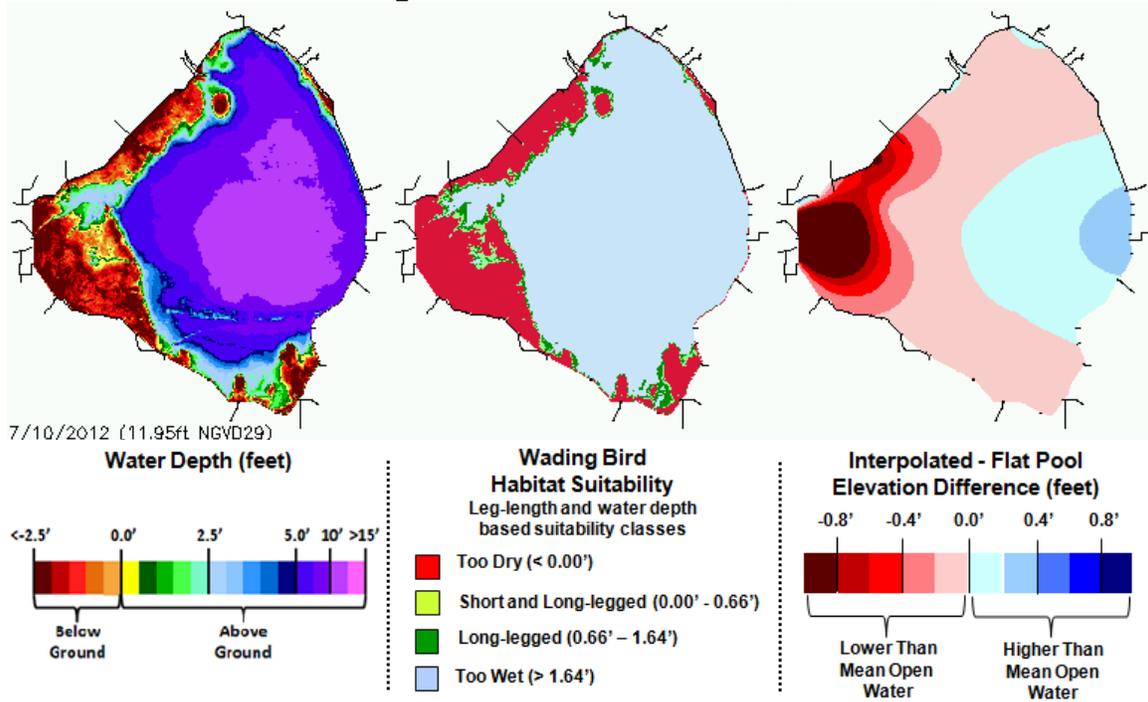
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Figure 2 – U.S. Drought Monitor for the Southeast Region.

Lake Okeechobee Water Depth Assessment Tool (WDAT)



Everglades South Florida Water Depth Assessment Tool (SFWDAT)

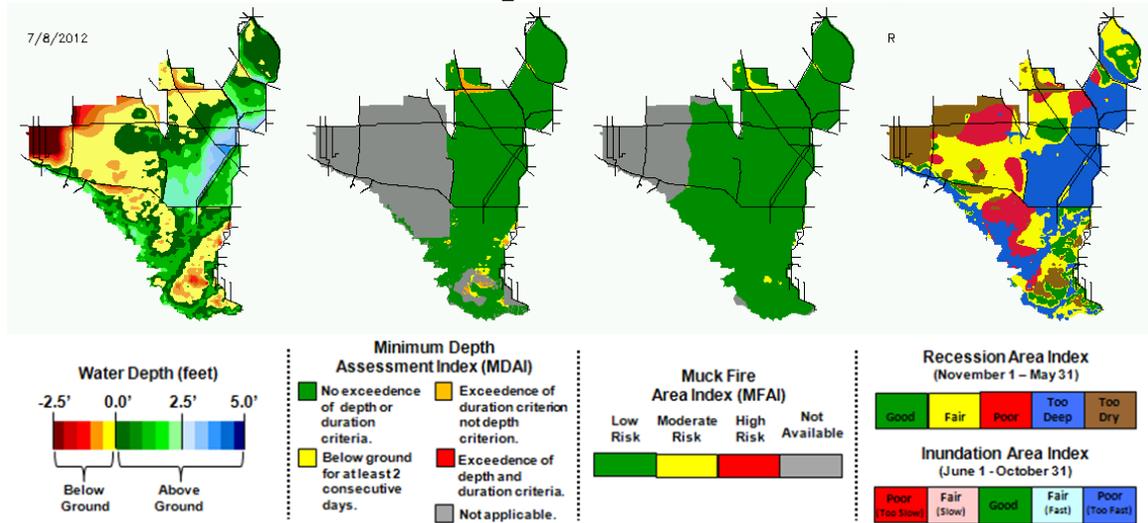
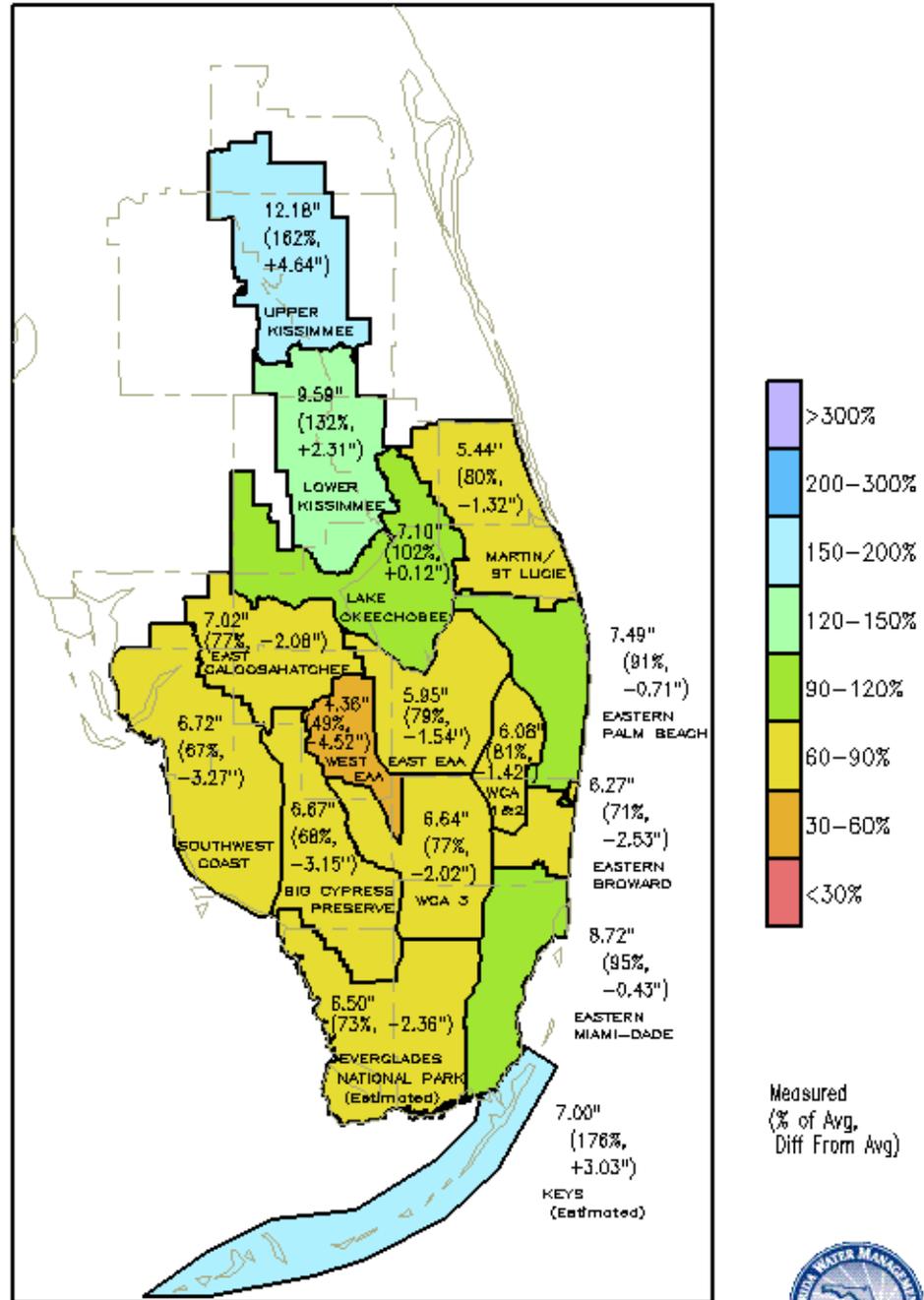


Figure 3 – SFWMD South Florida Water Depth Assessment Tool (SFWDAT) current water depths and wading bird habitat suitability for Lake Okeechobee. Current water depths, muck fire hazards and wading bird recession rates for the South Florida Everglades.

SFWMD Rainfall 02-jun-2012 to 01-jul-2012

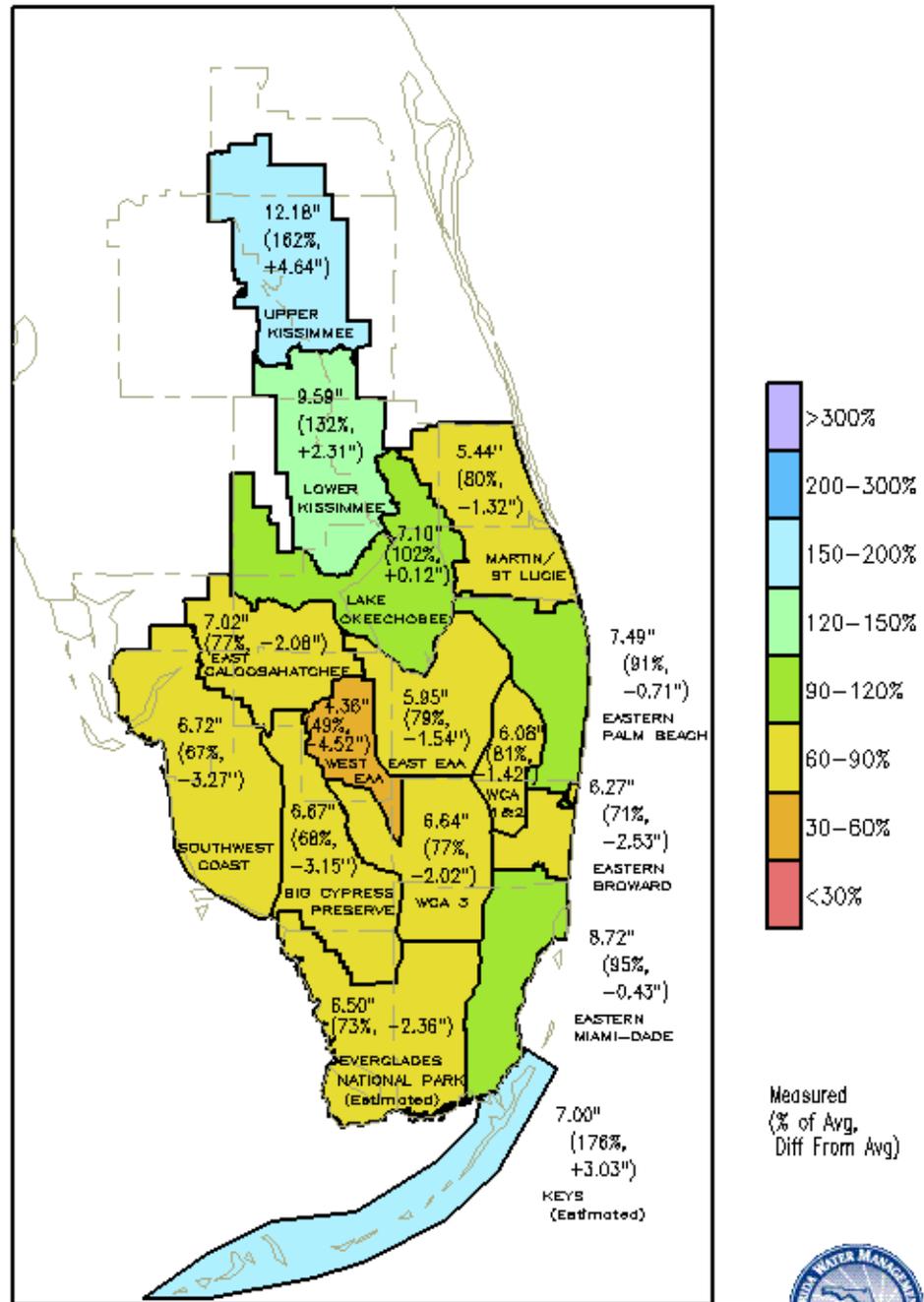


GrADS: COLA/IGES

Figure 4 – South Florida Water Management District rain totals for the month of June 2012.



SFWMD Rainfall 02-jun-2012 to 01-jul-2012



GrADS: COLA/IGES

Figure 5 – South Florida Water Management District Wet Season rainfall totals from June 2012. Rainfall of 70 - 90% of average has fallen from Lake O southward as 130 - 160% fell across the Kissimmee basin.



Drought Outlook for the Next 3 Months:

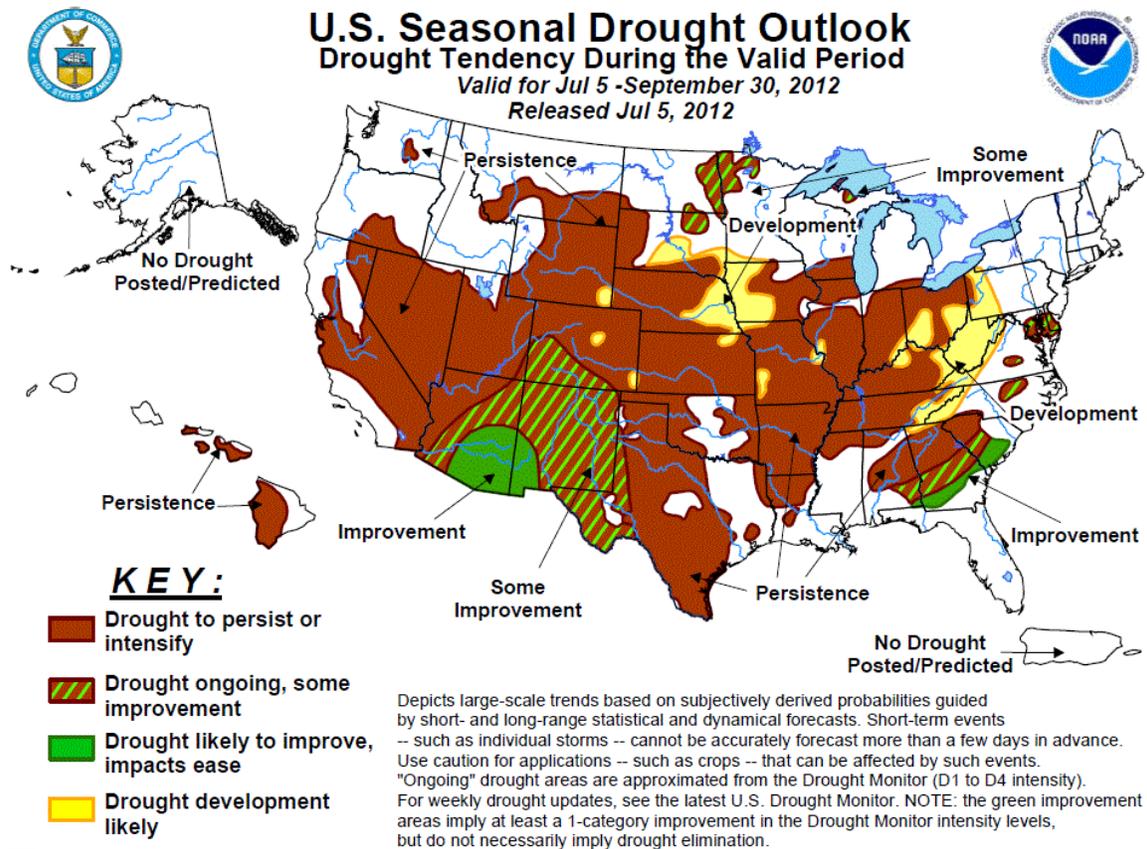


Figure 6 – Drought Outlook.

El Nino / La Nina (ENSO) Status – **El Nino Watch is in effect for remainder of 2012.** (Climate Prediction Center)

ENSO-neutral conditions continued in June as reflected in both the oceanic and atmospheric temperatures and circulations. However, warming equatorial Pacific sea surface temperatures (SST) is occurring, exceeding +0.5°C across the eastern Pacific Ocean. The oceanic heat content (average temperature in the upper 300m of the ocean) has also increased. Current observations are consistent with ENSO-neutral conditions, but reflect a likely progression towards El Niño.

Statistical and dynamical climate models continue to disagree on the likelihood of El Niño returning. The dynamical models, including the NCEP Climate Forecast System (CFS), largely favor the development of El Niño by September 2012, while the majority of statistical models predict ENSO-neutral through the rest of 2012. The forecaster consensus largely favors the dynamical model outcome for El Niño because those models tend to exhibit greater skill emerging from the Northern Hemisphere “spring barrier” (a period of relatively low confidence ENSO forecasts) and also due to the strengthening of observed signals indicating an evolution

towards El Niño. Overall, the forecaster consensus reflects increased chances for El Niño beginning in July-September 2012.

Expected El Niño effects for Florida include:

- Jet streams are farther south leading to a colder winter
- Wetter dry season
- Above average surface water elevations during the dry season
- Fewer fires with smaller burn areas
- Decreased lightning
- Decreased hurricane activity both the summer before and after the El Niño event

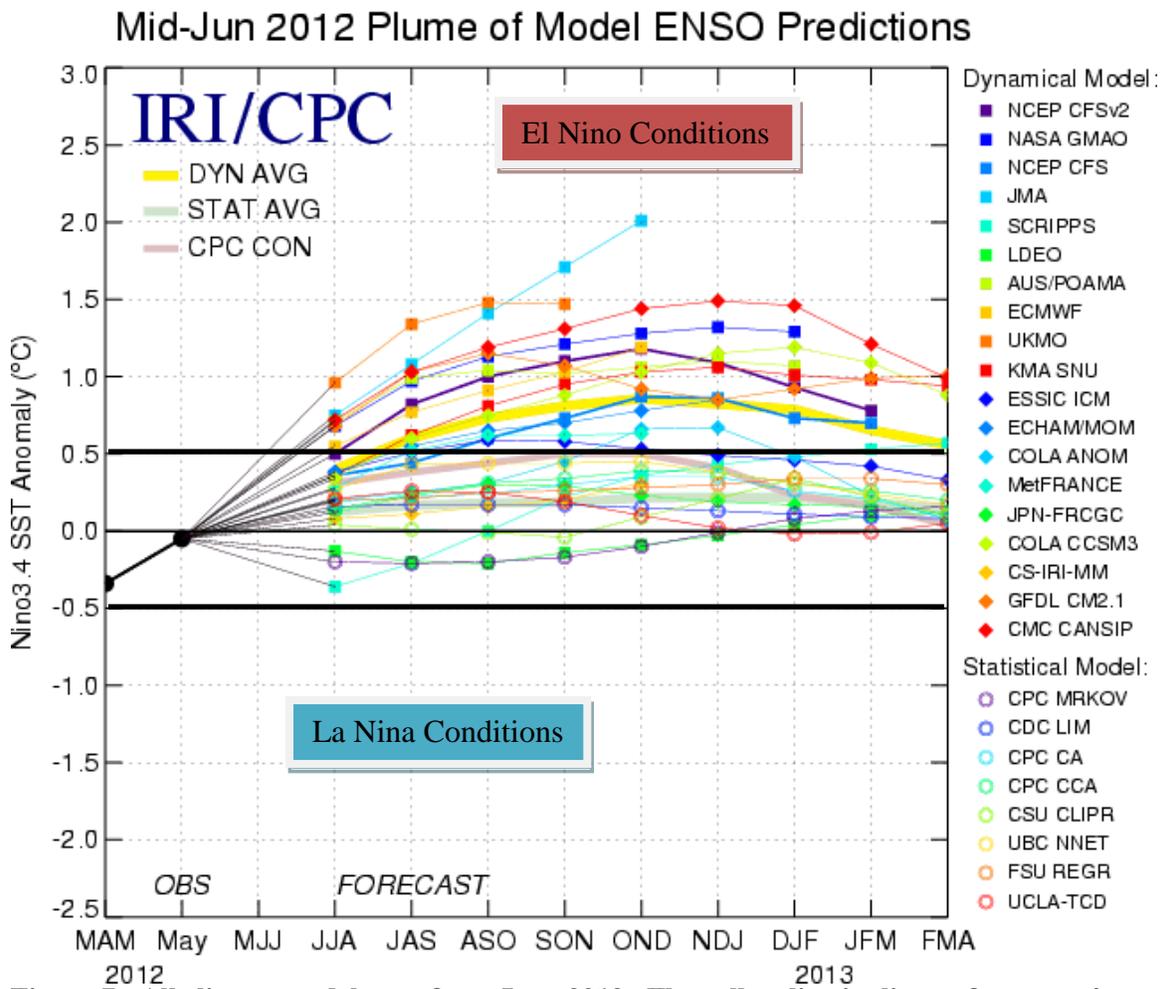


Figure 7 - All climate model runs from June 2012. The yellow line is climate forecaster's preferred dynamical model average indicating a progression towards El Niño developing by September 2012.

2012 Hurricane Season

On June 1, 2012, Dr. Kotzbach and Dr. Gray prepared their next quantitative forecast for this upcoming hurricane season:

Tropical Storms = 13

Hurricanes = 5

Major Hurricanes = 2

Hurricane Strike on eastern Florida = 28% chance

Central & South Florida Temperature Outlook:

July thru September –Warmer than Average

October thru May 2013 – Average

June 2013 – Much warmer than Average

Central & South Florida Rainfall Outlook:

July thru February 2013 – Much Wetter than Average

March 2013 – Wetter than Average

April thru June 2013 - Average

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