



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

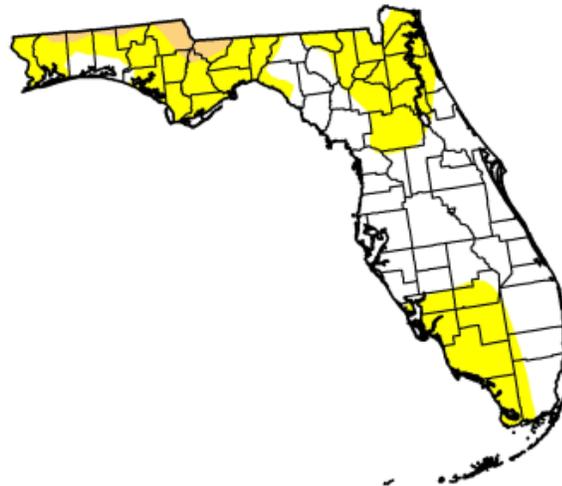
**Short Term Drought Map:**

**U.S. Drought Monitor**

**December 4, 2012**  
Valid 7 a.m. EST

**Florida**

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	52.72	47.28	3.13	0.00	0.00	0.00
Last Week (11/27/2012 map)	70.70	29.30	3.16	0.00	0.00	0.00
3 Months Ago (09/04/2012 map)	100.00	0.00	0.00	0.00	0.00	0.00
Start of Calendar Year (12/27/2011 map)	38.81	61.19	27.41	12.84	2.61	0.00
Start of Water Year (09/25/2012 map)	100.00	0.00	0.00	0.00	0.00	0.00
One Year Ago (11/29/2011 map)	63.01	36.99	26.19	18.79	8.62	0.00



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, December 6, 2012  
Richard Tinker, NOAA/GPC

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

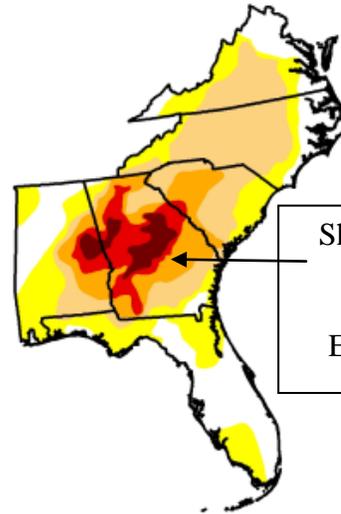
**Synopsis:** Abnormally dry conditions increased across northern and southwestern Florida during November due to below average rainfall.

# U.S. Drought Monitor

## Southeast

December 4, 2012  
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	24.29	75.71	49.33	21.27	9.79	3.43
Last Week (11/27/2012 map)	31.74	68.26	46.75	19.13	8.87	3.43
3 Months Ago (09/04/2012 map)	65.39	34.61	17.90	11.57	8.47	3.46
Start of Calendar Year (12/27/2011 map)	40.38	59.62	43.05	28.62	18.71	0.00
Start of Water Year (09/25/2012 map)	66.49	33.51	17.18	11.50	8.53	3.52
One Year Ago (11/29/2011 map)	46.23	53.77	42.25	30.92	19.10	0.00



**Intensity:**

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
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The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

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

**Synopsis** – In early November, short-term dryness in Alabama, Georgia, and North Carolina had resulted in rainfall deficits of 3 to 6 inches. This short-term dryness came on the heels of a severe 2-year drought where the deficits were never truly alleviated. Numerous USGS stream levels were below the tenth percentile, and several were at near-to record lows for early November. In mid-November, much needed rains totaling 0.75 to 1.25 inches in the western Appalachians kept abnormal dryness from developing. Moderate to severe drought conditions expanded in east-central and northern Georgia as both short and long-term deficiencies grew. At least some decent rain (0.5 to 1 inch) fell on parts of northwestern Georgia, preventing further degradation there. Temperatures during this time were cooler-than-normal. By the end of November, a disturbance triggered showers (0.75 to 2 inches) from east-central Georgia into southern North Carolina, but the rain was not heavy enough to afford any substantial drought relief. One exception was the southeastern tip of North Carolina, where amounts of 2 to 4 inches alleviated Abnormal Dryness (D0). From central and southern Alabama into Georgia and interior portions of the Carolinas, rainfall deficits continued to mount (25 to 50 percent of normal over the past 90 days) while stream flows and soil moisture levels fell further.

# Lake Okeechobee Water Depth Assessment Tool

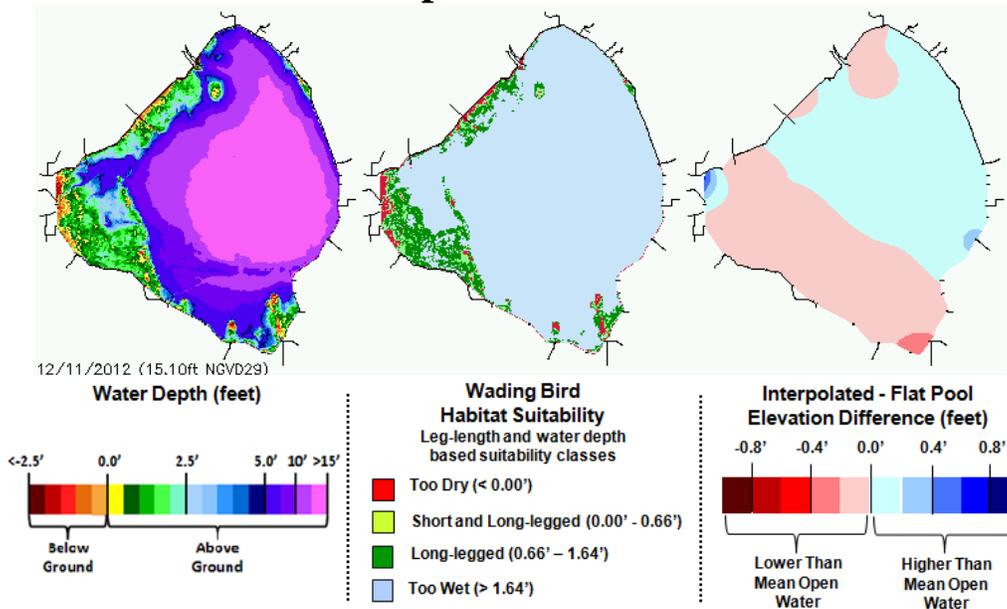


Figure 3 – SFWMD Water Depth Assessment Tool (WDAT) current water depths and wading bird habitat suitability for Lake Okeechobee.

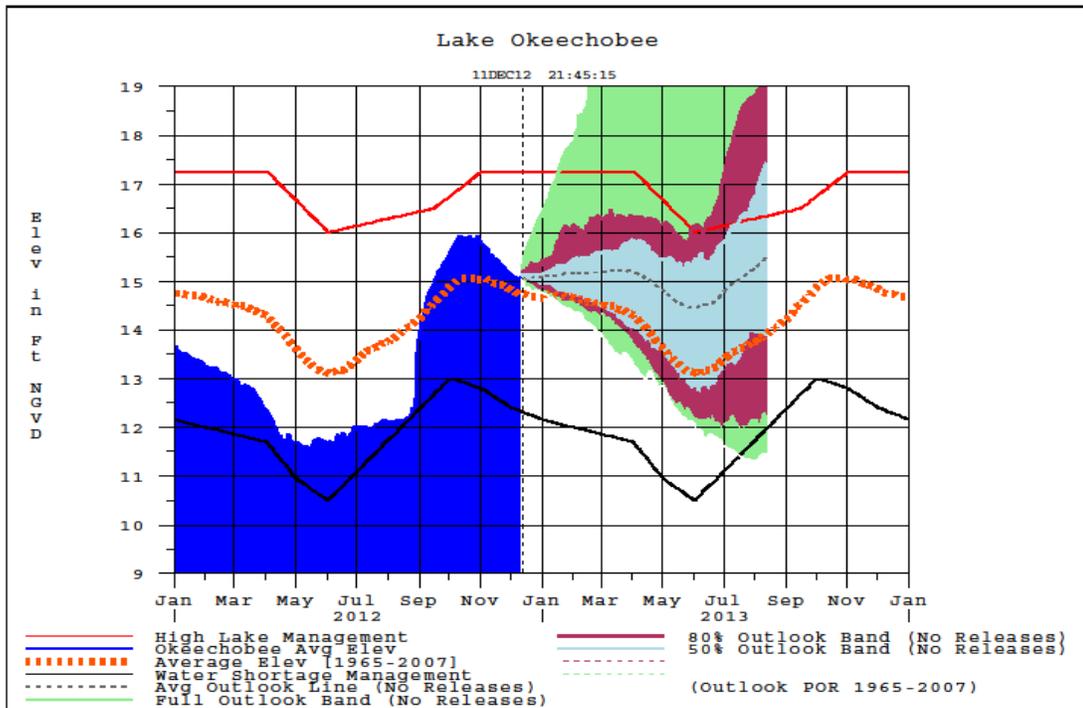
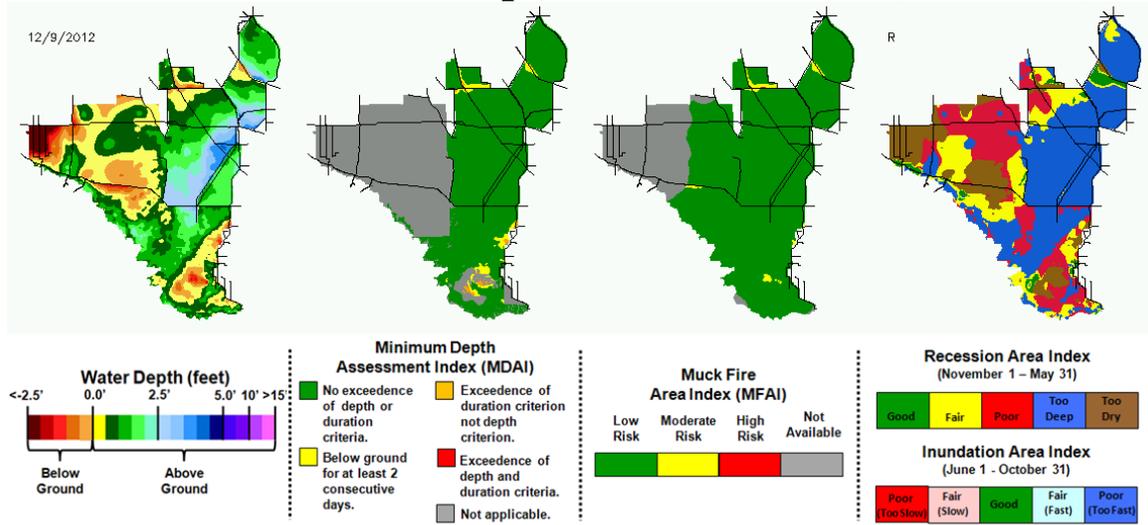


Figure 4 – USACE current lake levels, management bands, and potential outlook levels.

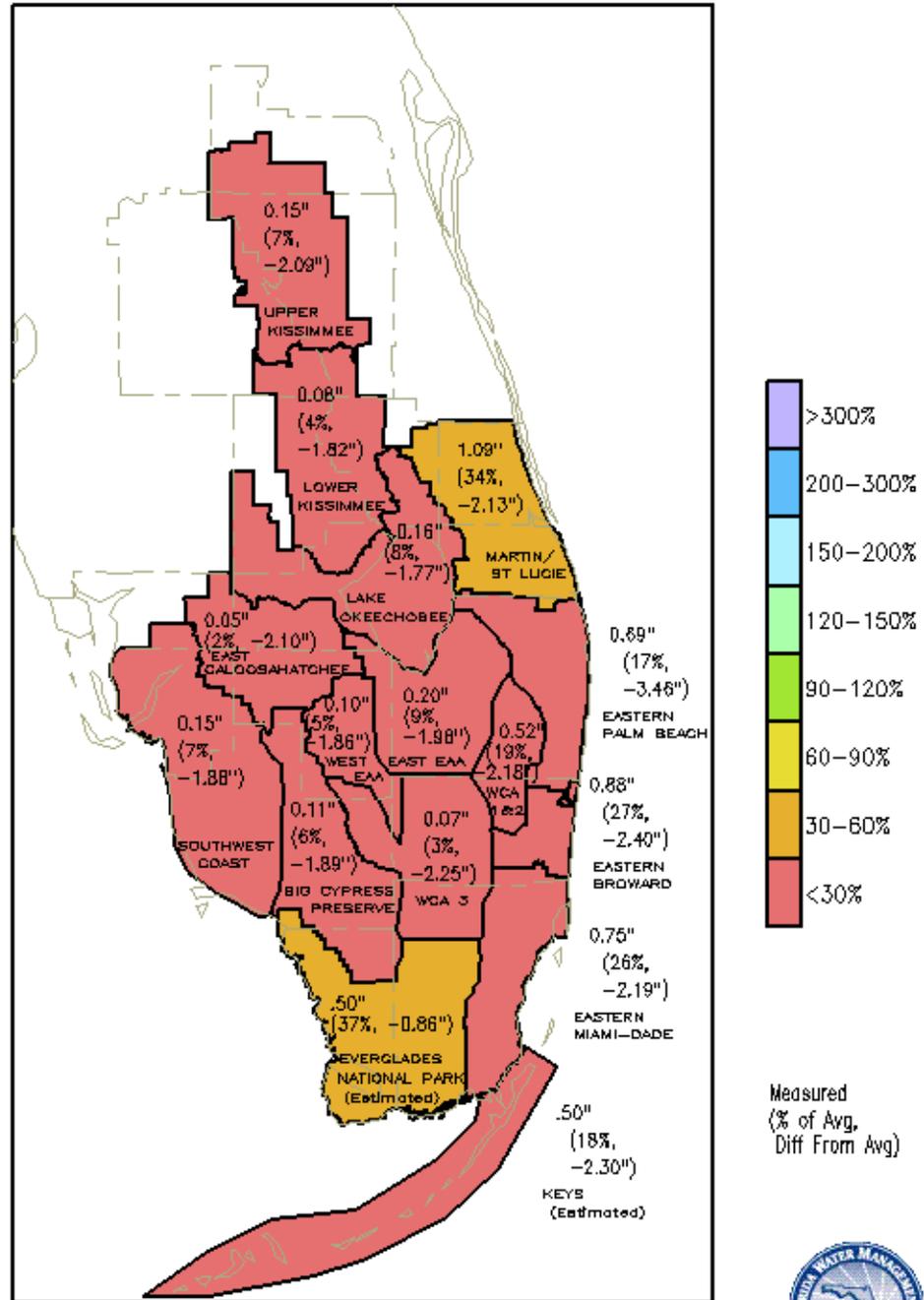
# Everglades

## South Florida Water Depth Assessment Tool (SFWDAT)



**Figure 5 – SFWMD South Florida Water Depth Assessment Tool (SFWDAT) with current water depths, muck fire hazards and wading bird recession rates for the Greater Everglades.**

## SFWMD Rainfall 02-nov-2012 to 01-dec-2012



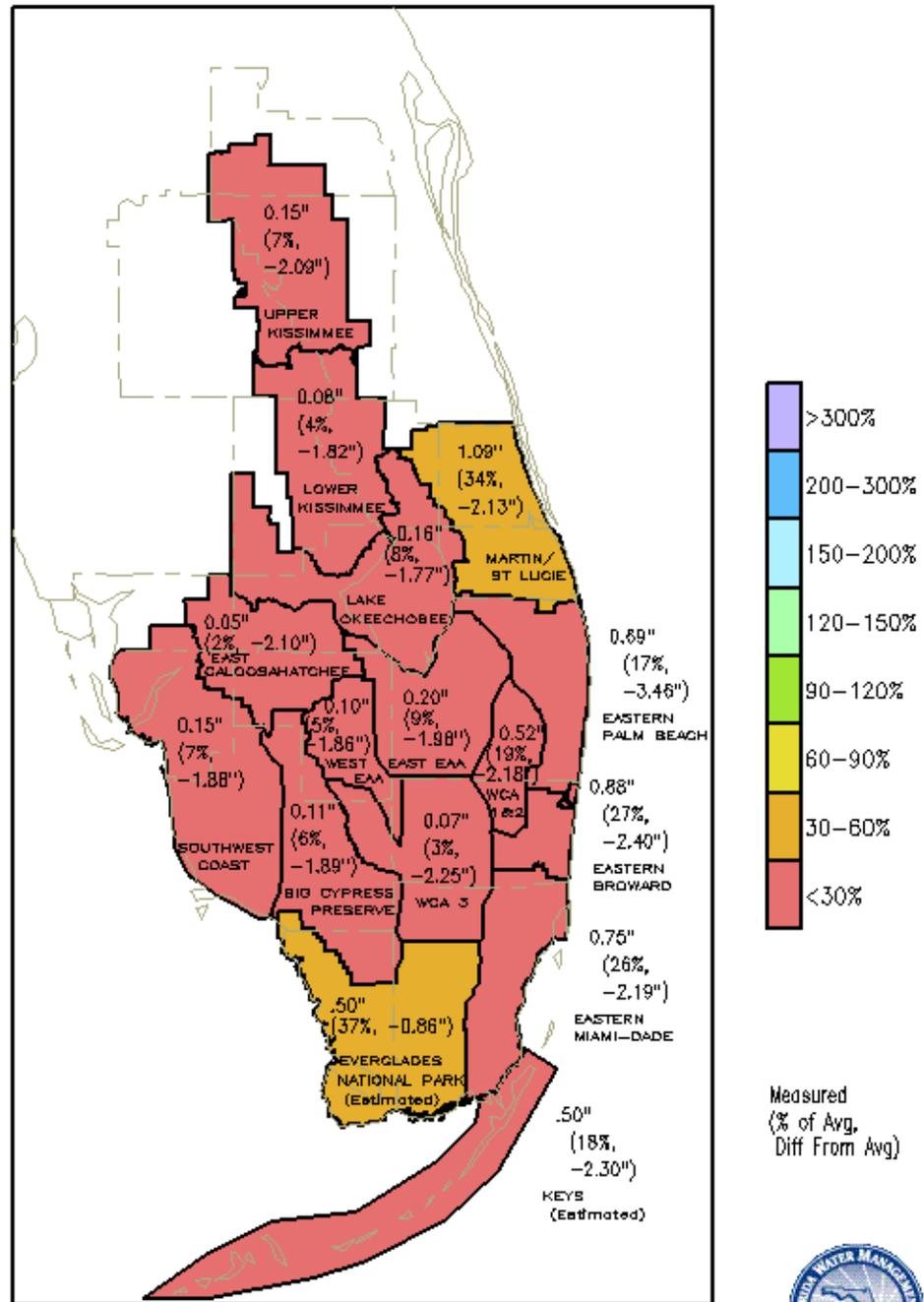
**DISTRICT-WIDE: 0.29" (12%, -2.07")**

GRADS: COLA/IGES

**Figure 6 – South Florida Water Management District rain totals for the month of November 2012. Much drier conditions occurred.**



## SFWMD Rainfall 02-nov-2012 to 01-dec-2012



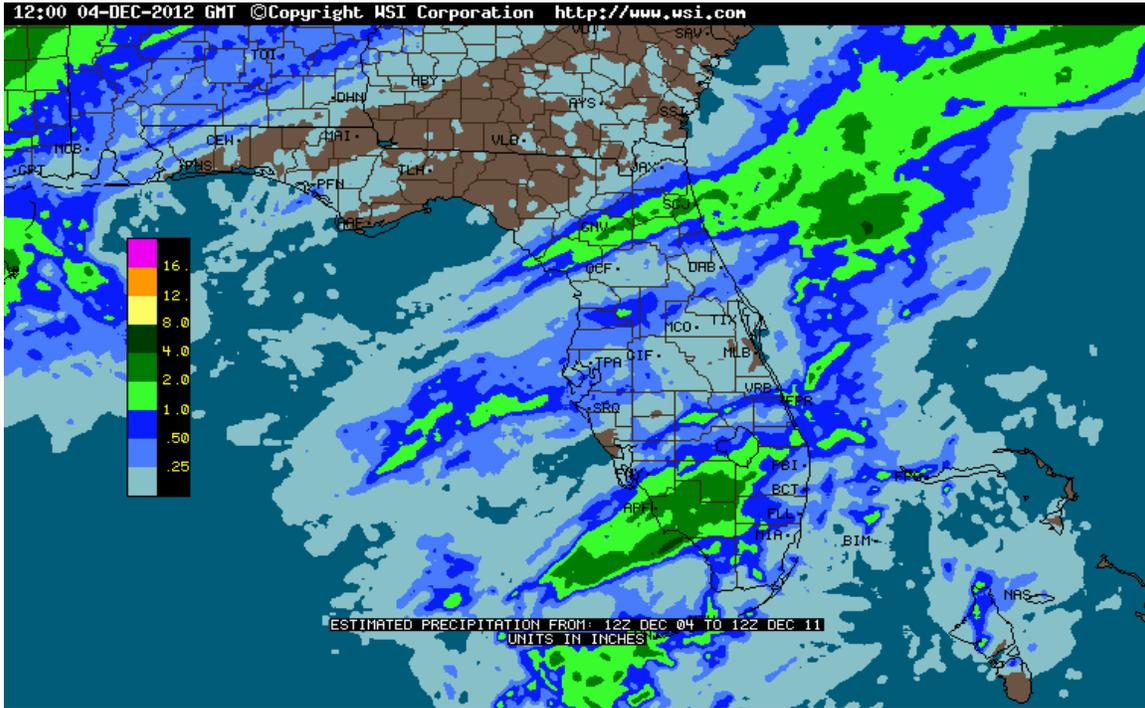
**DISTRICT-WIDE: 0.29" (12%, -2.07")**

GrADS: COLA/IGES

**Figure 7 – South Florida Water Management District Dry Season rainfall totals from November 1 to present with 30 – 60% of average rainfall.**

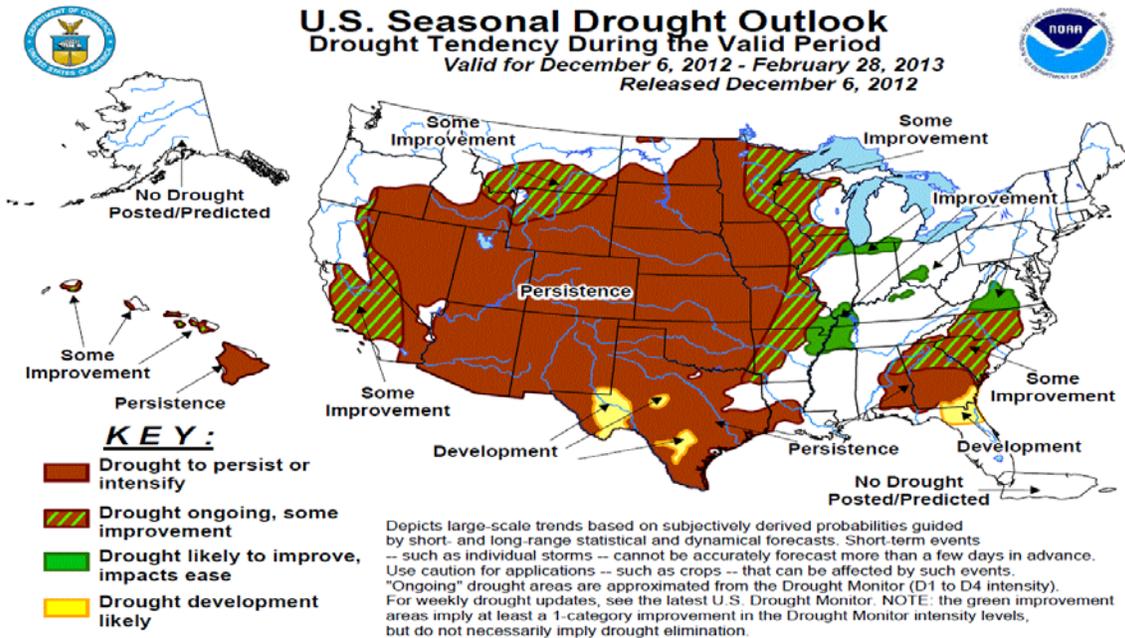


**Last Week's Rain:**



**Figure 8 – Pre-frontal rainfall occurred over the last 3 days.**

**Drought Outlook for the Next 3 Months:**

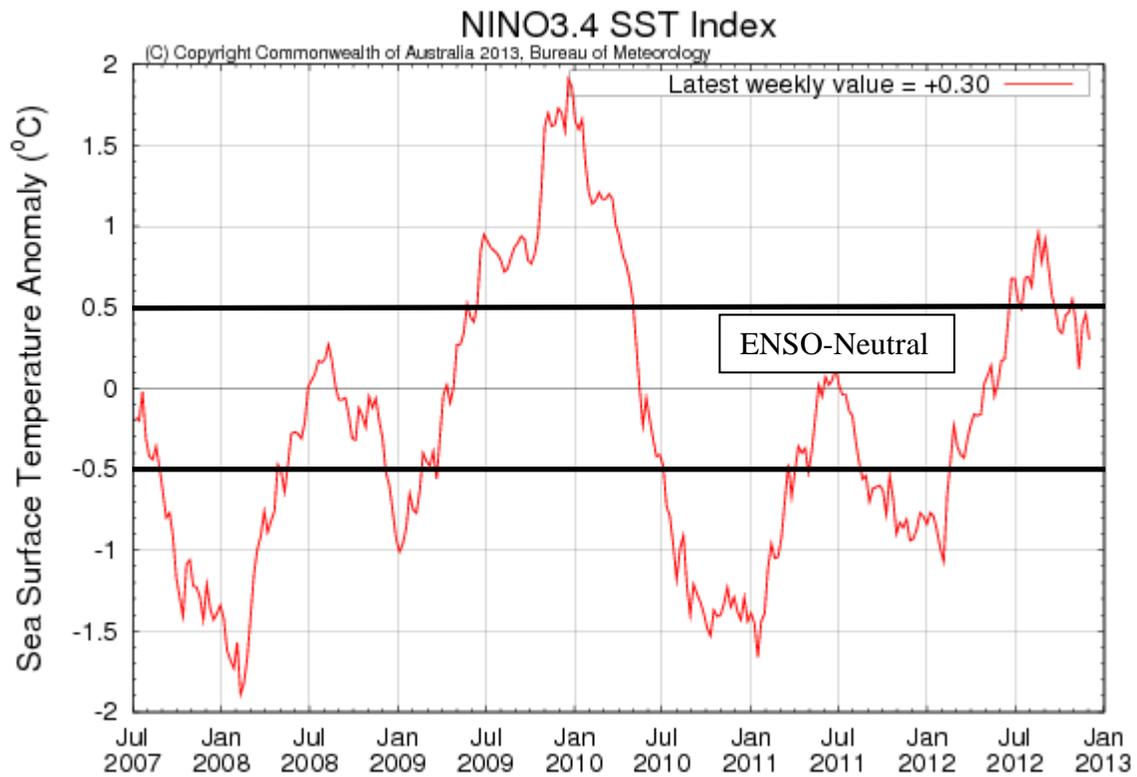


**Figure 9 – Drought Outlook for the next 3 months.**

## El Nino / La Nina (ENSO) Status (Climate Prediction Center)

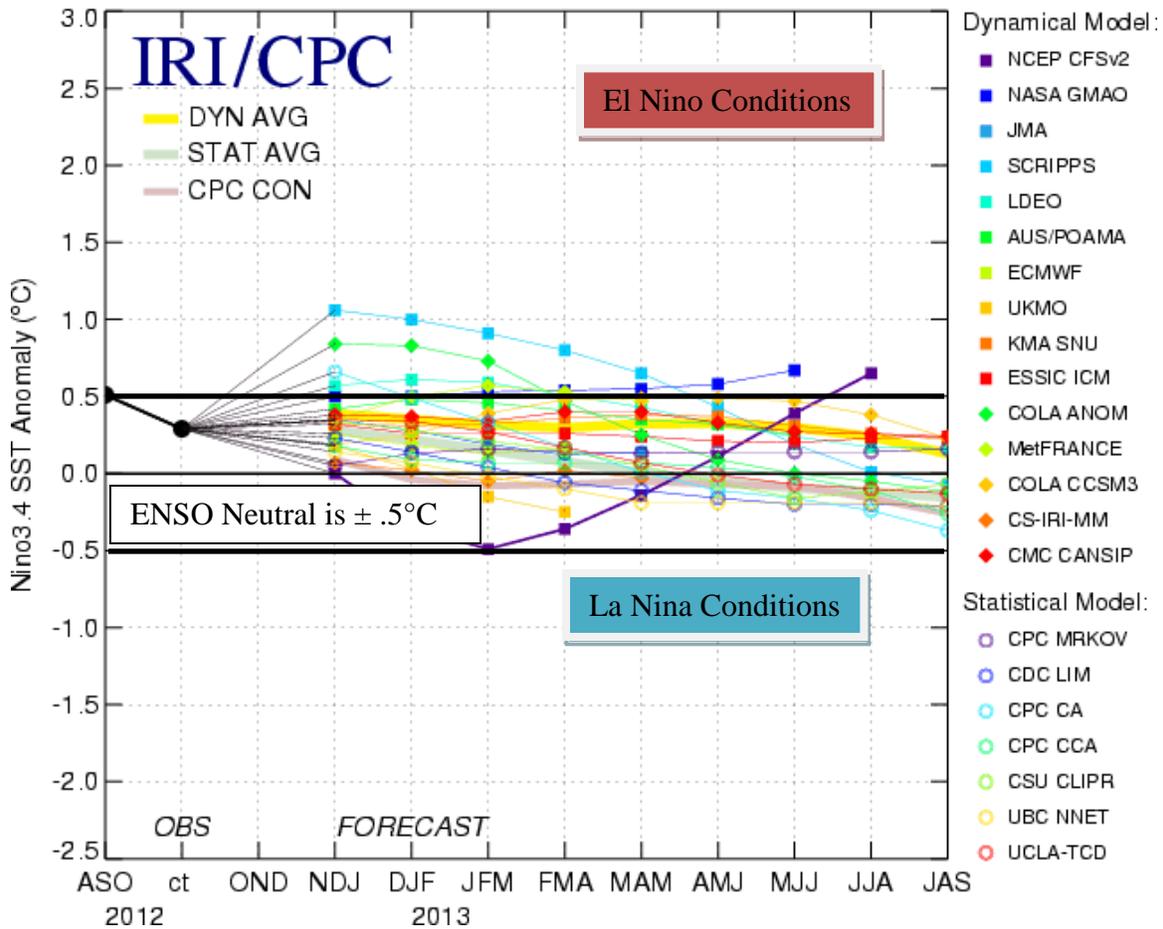
**Highlights - ENSO-neutral is expected for the 2012-13 dry season.**

During November, the Pacific Ocean atmosphere reflected ENSO-neutral conditions while the ocean water temperatures were slightly warmer than average. However, models generally agree on an ENSO-neutral 2012-2013 winter and spring.



**Figure 10 – Sea Surface Temperatures (SST) for Nino 3.4 region of the Pacific Ocean.**

## Mid-Nov 2012 Plume of Model ENSO Predictions



**Figure 11 - All climate model runs from November 2012. The yellow line is climate forecaster's preferred dynamical model average indicating ENSO-Neutral conditions through the upcoming winter and spring months.**

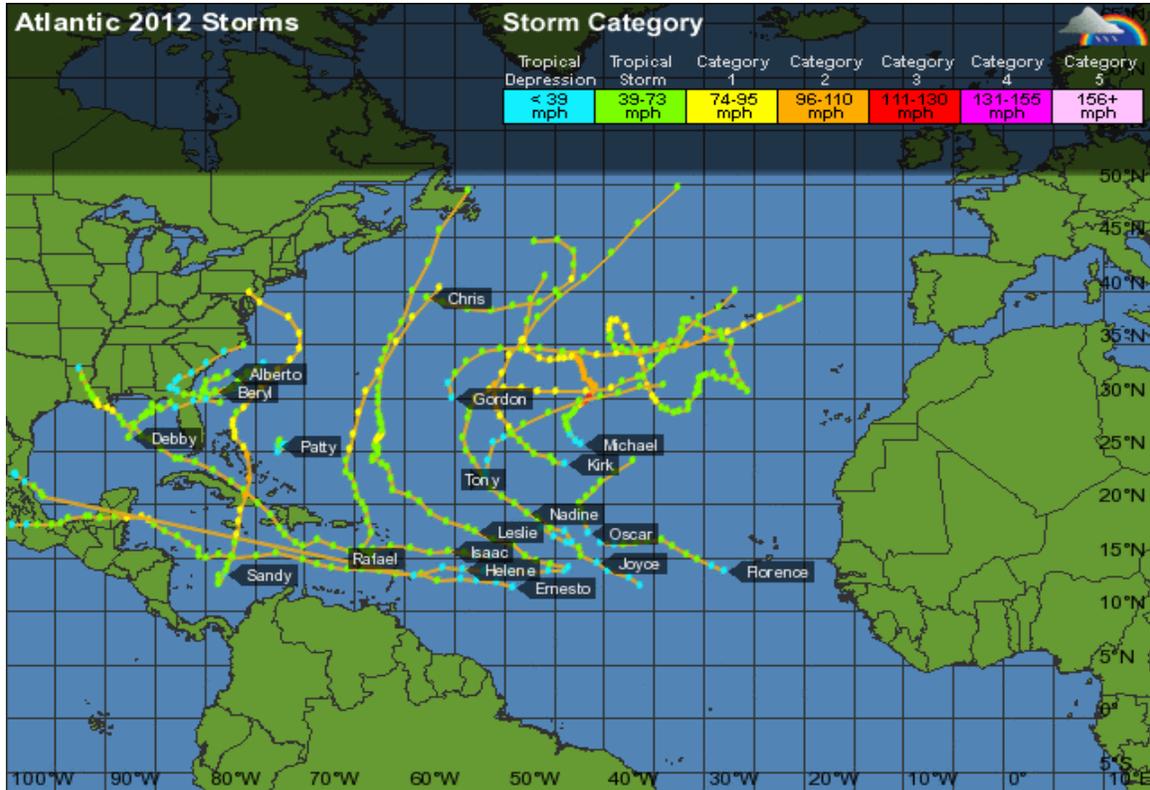
### Expected ENSO-Neutral effects for Florida include:

- Jet streams are occasionally farther south leading to a cooler winter with the possibility of short duration cold periods.
- Average dry season rainfall.
- Average surface water elevations during the dry season.
- Average fires.
- Average hurricane activity in the upcoming hurricane season.

## 2012 Hurricane Season

Colorado State University hurricane predictions with current tropical cyclone statistics:

Forecast:	Actual:
Tropical Storms = 14	19
Hurricanes = 6	10
Major Hurricanes = 2	1



**Figure 12– 2012 Hurricane Season Recap.**

### Central & South Florida Temperature Outlook:

November thru February 2013 – Cooler than Average  
 March thru April 2013 – Average  
 May 2013 – Warmer than Average  
 June thru September 2013 – Much Warmer than Average  
 October 2013 – Warmer than Average  
 November 2013 - Average

### Central & South Florida Rainfall Outlook:

December - Below Average  
 January 2013 thru November 2013 – Average

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