



**Drought Status and Climate Outlook for Upcoming 12 Months
FWS SFESO – Vero Beach, FL
November 13, 2012**

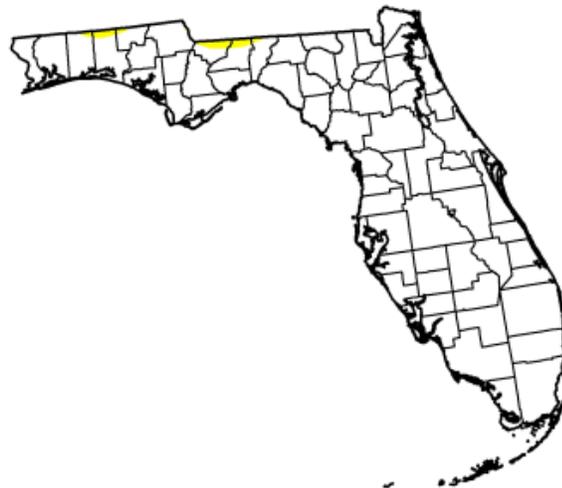
Short Term Drought Map:

U.S. Drought Monitor

November 6, 2012
Valid 7 a.m. EST

Florida

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	98.90	1.10	0.00	0.00	0.00	0.00
Last Week (10/30/2012 map)	100.00	0.00	0.00	0.00	0.00	0.00
3 Months Ago (08/07/2012 map)	88.09	11.91	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 (11/01/2011 map)	62.98	37.02	26.16	18.36	7.98	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.



Released Thursday, November 8, 2012

David Miskus, Climate Prediction Center/NCEP/NWS/NOAA

<http://droughtmonitor.unl.edu>

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

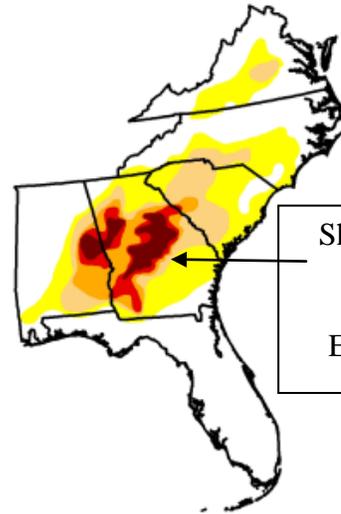
Synopsis: There are no current short-term or long-term drought conditions in Florida.

U.S. Drought Monitor

Southeast

November 6, 2012
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	53.19	46.81	22.90	12.30	6.85	3.52
Last Week (10/30/2012 map)	60.40	39.60	16.77	10.50	5.99	2.05
3 Months Ago (08/07/2012 map)	49.29	50.71	29.00	17.49	11.18	5.25
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 (11/01/2011 map)	41.84	58.16	44.93	32.80	21.45	0.00



Intensity:

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- D1 Drought - Moderate
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Figure 2 – U.S. Drought Monitor for the Southeast Region.

Synopsis – In early October, improvements to drought conditions were felt across northern Georgia while no large changes were made elsewhere across the Carolinas or Alabama. By the second week of October, lack of rainfall prompted the expansion of abnormally dry conditions (D0) across the eastern Carolinas and central and southern Georgia. Across Alabama, stream flows had decreased to the 9th percentile in Crenshaw and Pike counties.

Hurricane Sandy Overview - During the last week of October, Hurricane Sandy moved northward up and along the Eastern Seaboard making landfall near Atlantic City, New Jersey on October 29th. Rainfall from Sandy created significant flooding from coastal North Carolina northward into New England. Hurricane Sandy produced nearly two feet of snow in western Maryland and West Virginia. More than 8.2 million people experienced power outages from the combination of rain, wind, snow, and flooding. Transportation was disrupted with more than 10,000 flights cancelled and many roads and bridges impassable. As of October 30, thirty-nine deaths in the U.S. were attributed to the storm. The East Coast of Florida and coastal North Carolina received beneficial precipitation from Sandy (Figure 3). Along coastal North Carolina, including the Outer Banks, Abnormal Dryness (D0) was alleviated. Conversely, in central North Carolina, Abnormal Dryness (D0) expanded. Most of Georgia and southern Alabama deteriorated

to Moderate Drought (D1) and Abnormal Dryness (D0) conditions due to rainfall deficits last month.

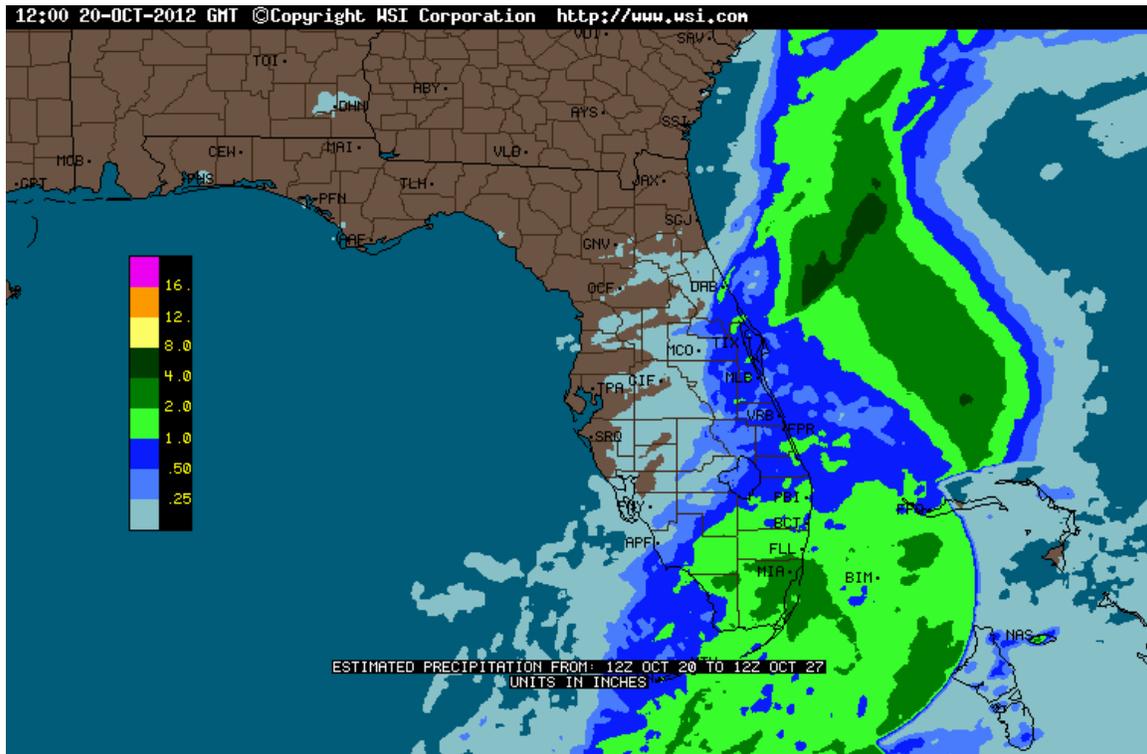


Figure 3 – Rainfall totals for Florida from Hurricane Sandy the week of October 20-27, 2012.

Lake Okeechobee Water Depth Assessment Tool (WDAT)

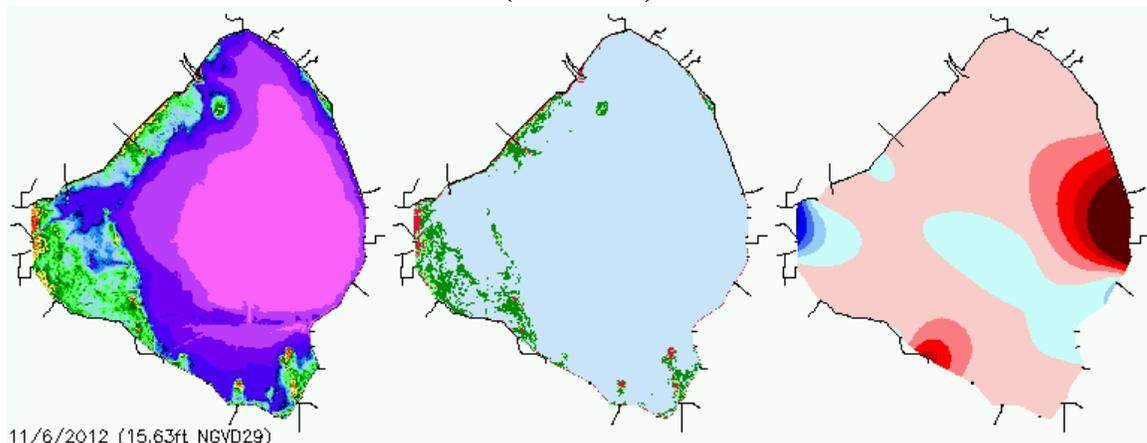




Figure 4 – SFWMD Water Depth Assessment Tool (WDAT) current water depths and wading bird habitat suitability for Lake Okeechobee.

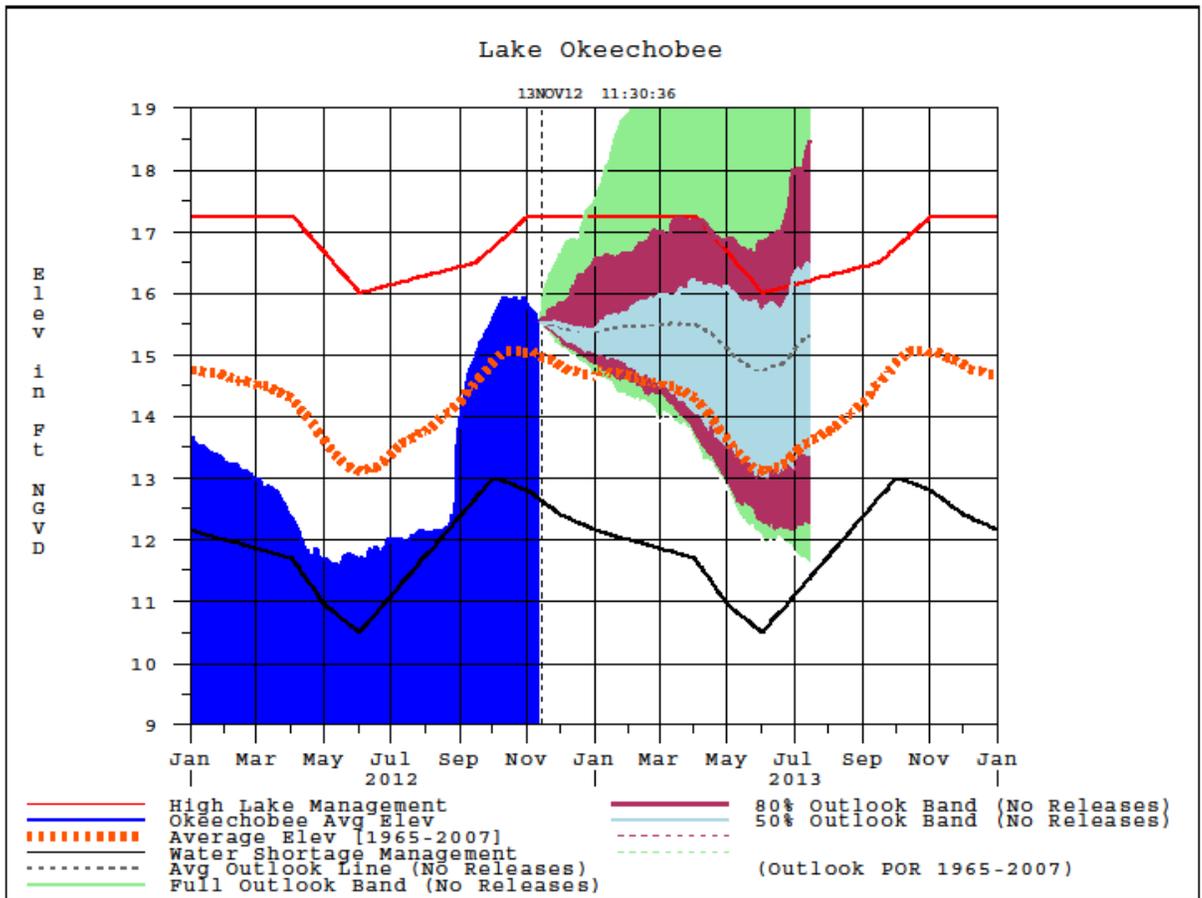


Figure 5 – USACE current lake levels, management bands, and potential outlook levels.

Everglades

South Florida Water Depth Assessment Tool (SFWDAT)

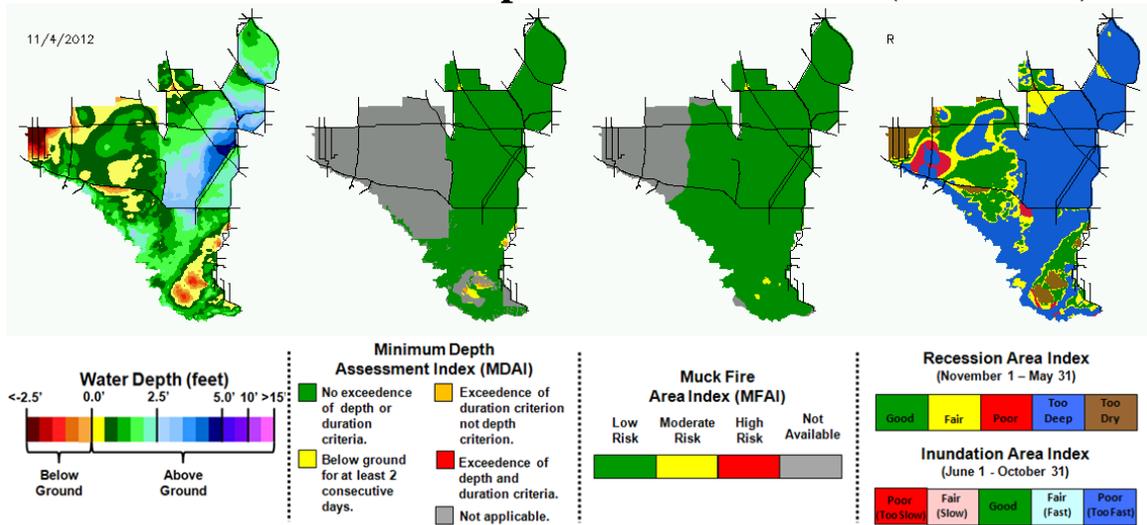
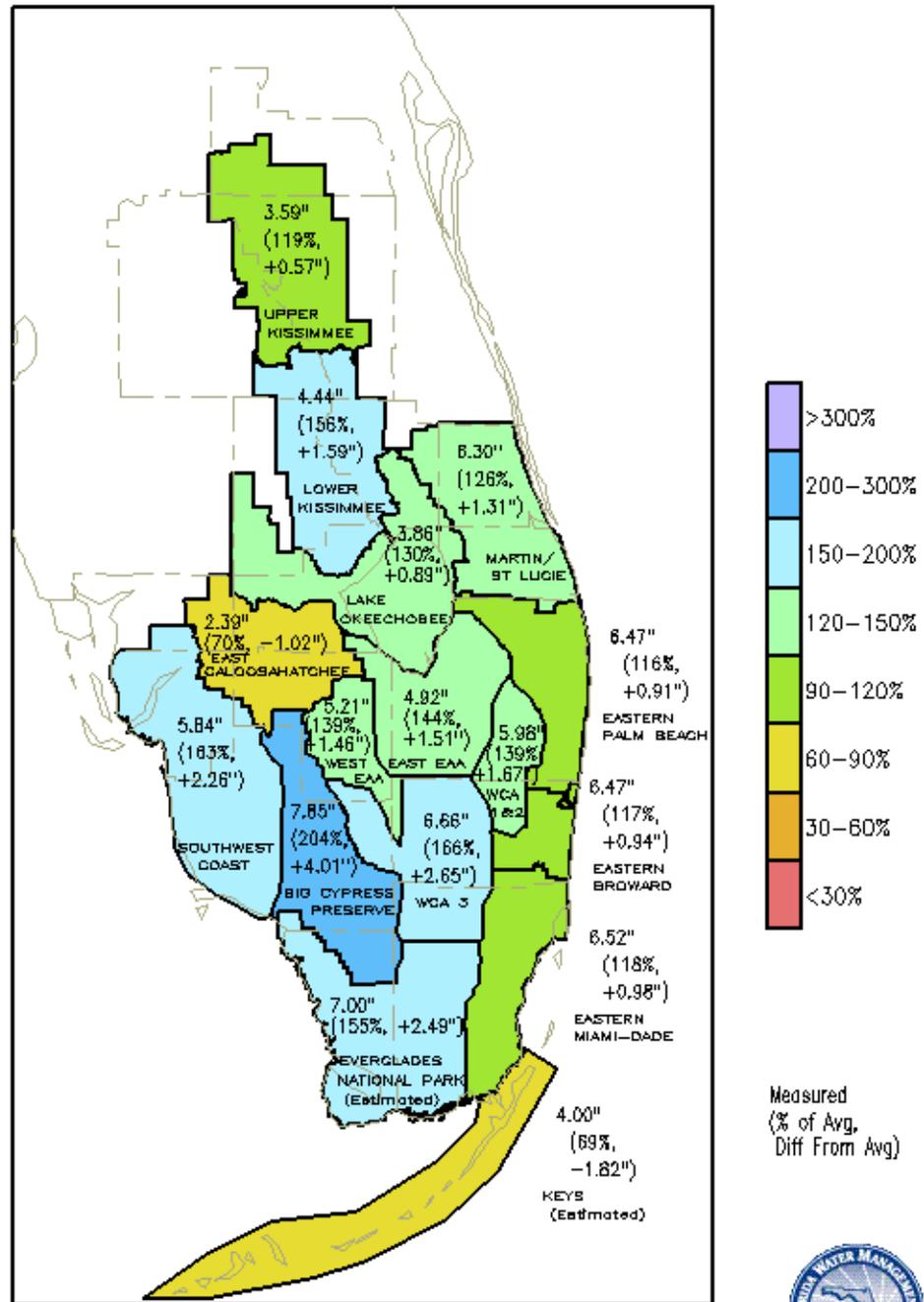


Figure 6 – SFWMD South Florida Water Depth Assessment Tool (SFWDAT) with current water depths, muck fire hazards and wading bird recession rates for the Greater Everglades.

SFWMD Rainfall 02-oct-2012 to 01-nov-2012



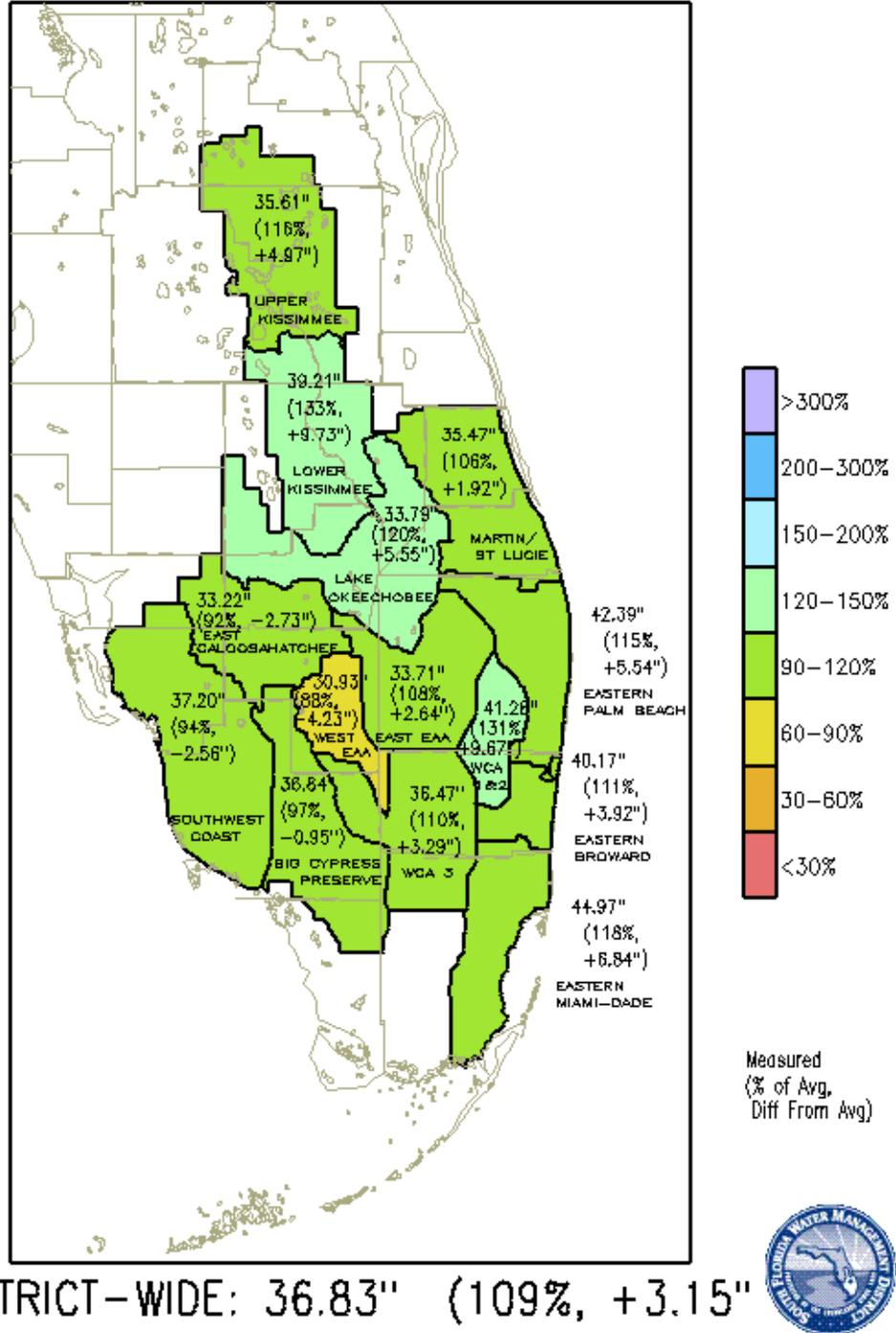
DISTRICT-WIDE: 5.32" (141%, +1.54")

GrADS: COLA/IGES

Figure 7 – South Florida Water Management District rain totals for the month of October 2012. From the Kissimmee basin into the Greater Everglades, the month of October was a wetter than average month.



SFWMD Rainfall 02-JUN-2012 to 01-NOV-2012



GrADS: COLA/IGES

2012-11-13-12:02

Figure 8 – South Florida Water Management District Wet Season rainfall totals from June 1, to October 31, 2012. This Wet Season was wetter than average.

Last Week's Rain:

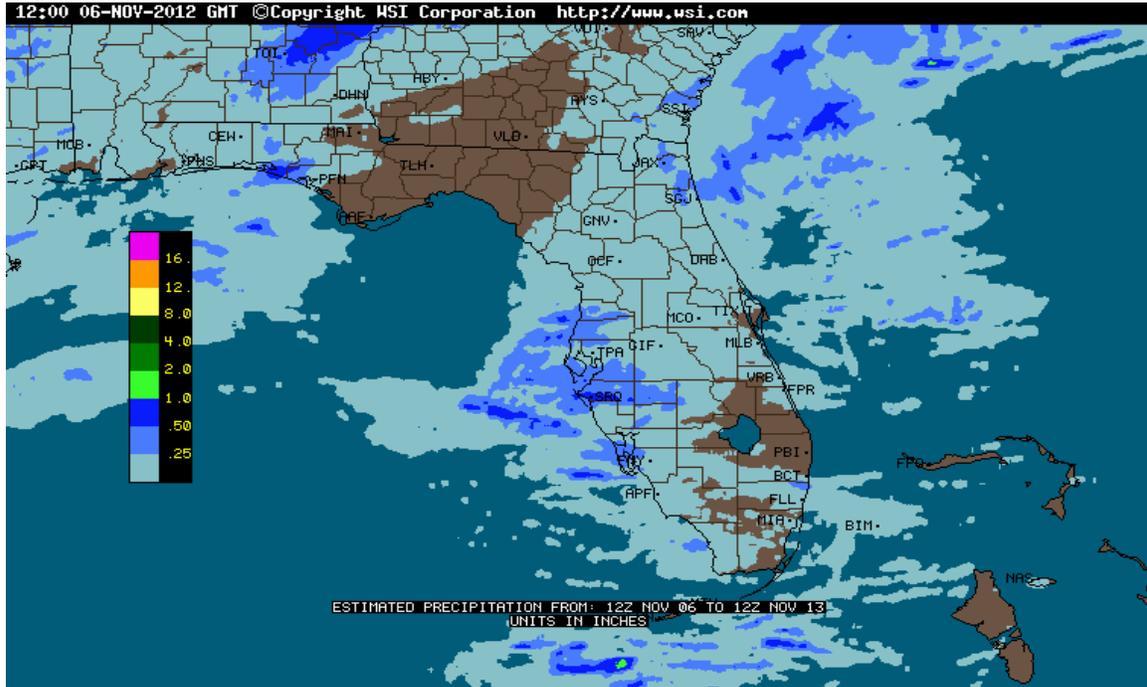


Figure 9 – The 2012-2013 Dry Season has begun!

Drought Outlook for the Next 3 Months:

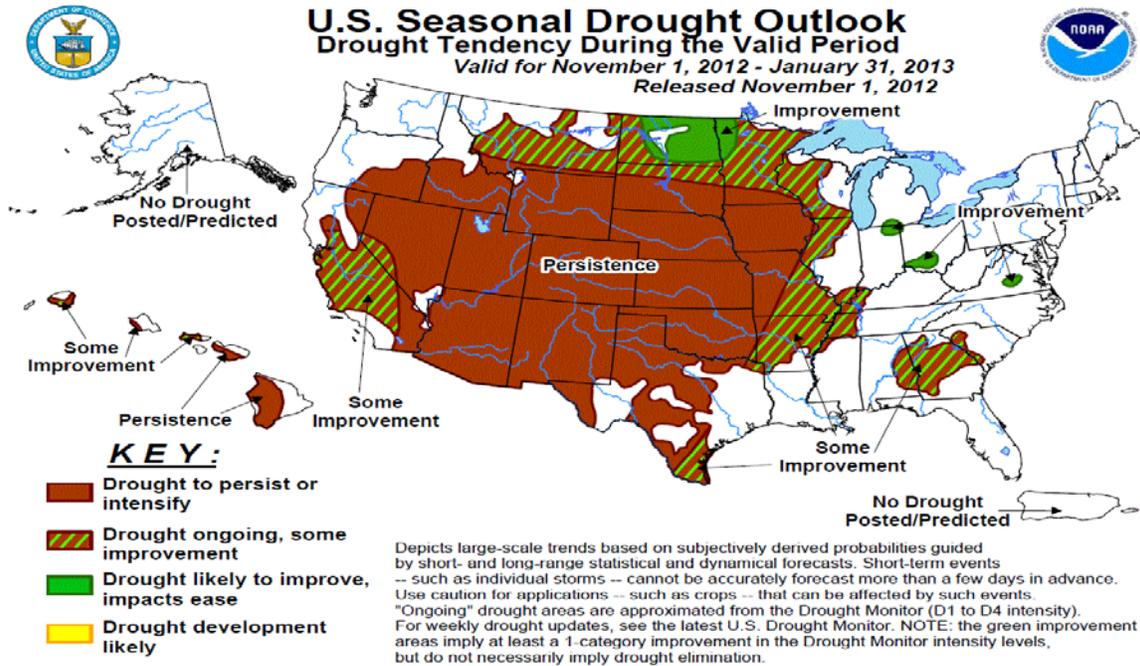


Figure 10 – Drought Outlook for the next 3 months indicating some improvements.

El Nino / La Nina (ENSO) Status – El Nino Watch has been cancelled.
(Climate Prediction Center)

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

During October 2012, the Pacific Ocean and atmospheric conditions continued to reflect borderline ENSO-neutral / weak El Niño conditions. The following are some of the current indicators that represent conditions that are likely or not likely to reflect an upcoming El Nino or La Nina event:

- Southern Oscillation Index = 4 (Neutral = +8 to -8)
- Trade Winds = Average (diminishing winds signal El Nino)
- Tropical Cloud Patterns – Slightly below average. (clouds increase prior to El Nino events.)
- Sea Surface Temperatures (SST):
 - Western and Central Pacific = Warmer than average.
 - Eastern Pacific = Average (temperatures warm before El Nino)

The oceanic heat content (average temperature in the upper 300m of the ocean) increased slightly last month, however the tropical atmosphere remained largely consistent with ENSO-neutral conditions. While the tropical ocean and atmosphere may resemble a weak El Niño at times, it is now considered less likely that a full El Niño will develop. The El Niño Watch has been cancelled. While the development of El Niño, or even La Niña, cannot be ruled out during the next few months, ENSO-neutral is now favored through the winter 2012-13.

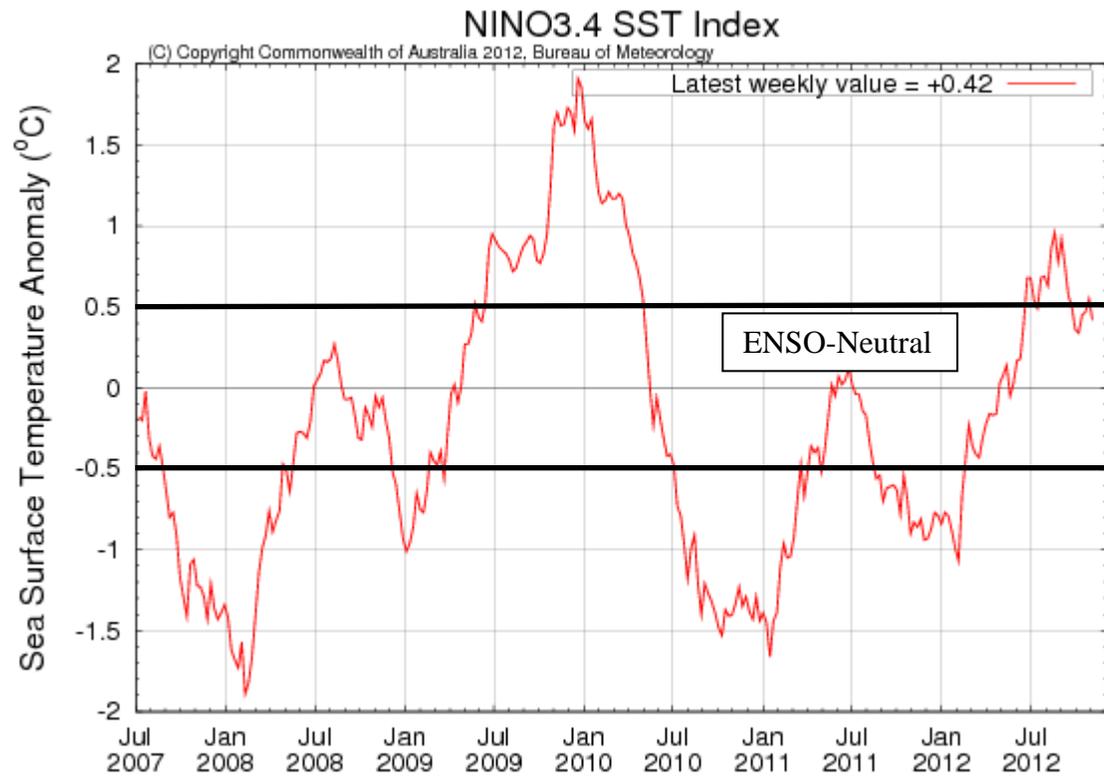


Figure 11 – Sea Surface Temperatures (SST) for Nino 3.4 region of the Pacific Ocean.

Mid-Oct 2012 Plume of Model ENSO Predictions

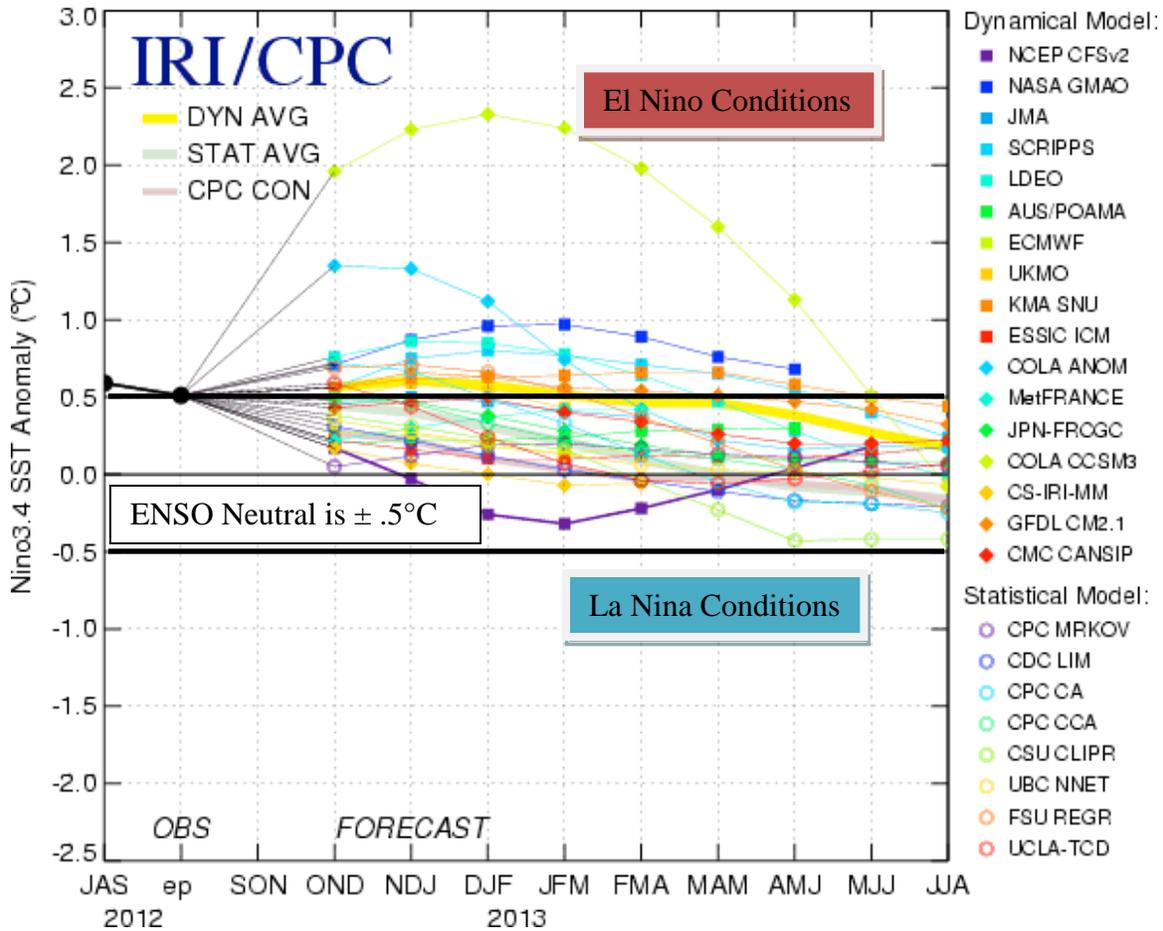


Figure 12 - All climate model runs from October 2012. The yellow line is climate forecaster's preferred dynamical model average indicating aENSO-Neutral / weak El Niño through the winter months.

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

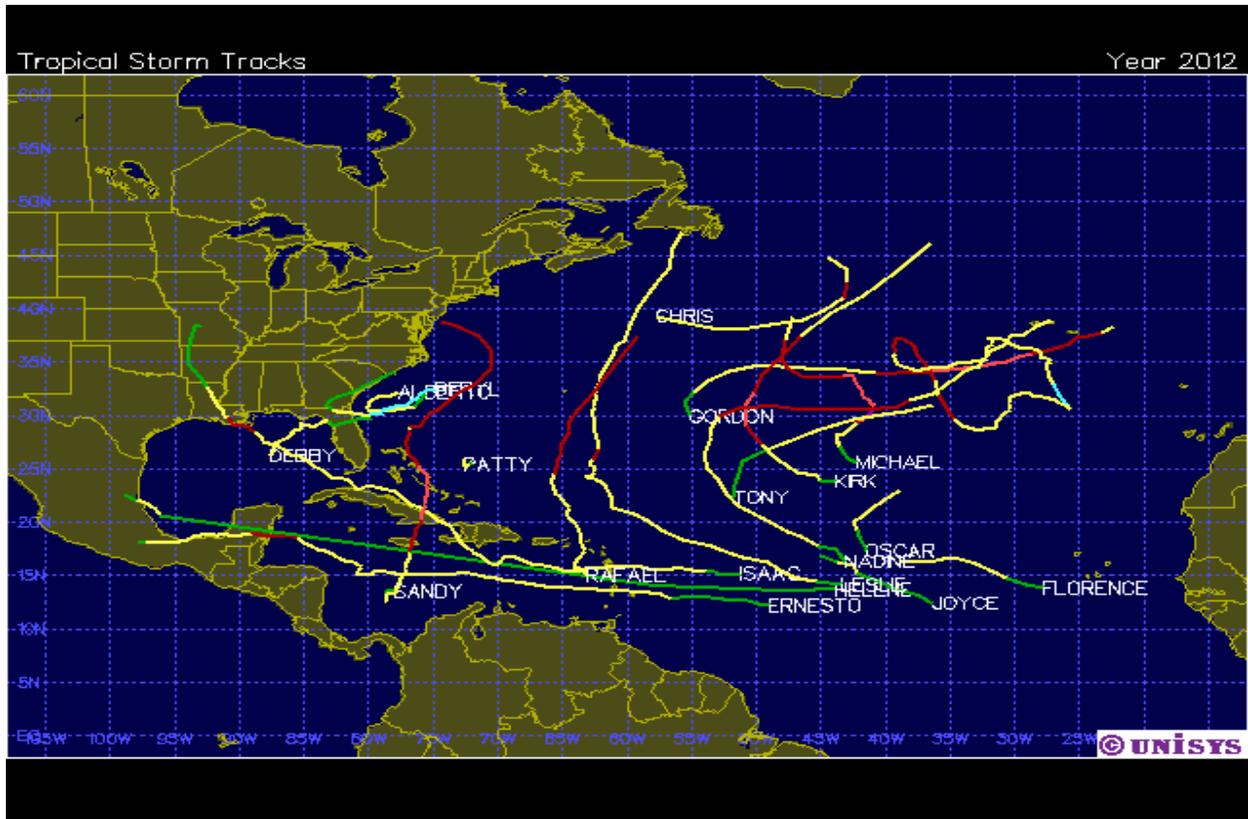


Figure 13 – 2012 Hurricane Season Recap.

Central & South Florida Temperature Outlook:

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

Central & South Florida Rainfall Outlook:

November 2012 thru October 2013 – Average

Lori Miller – FWS Hydrologist - 772.469.4231