



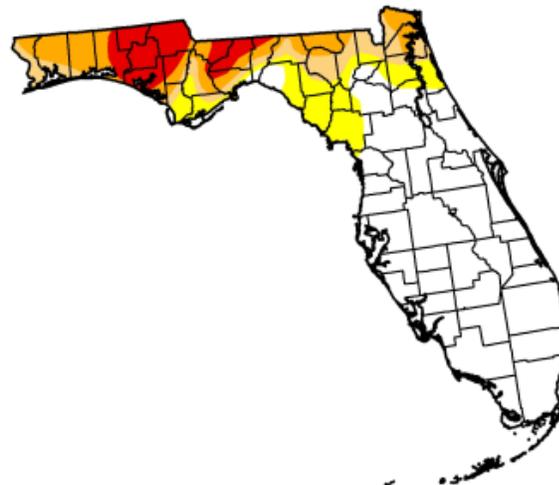
**Drought Status and Climate Outlook for Upcoming 12 Months  
FWS SFESO – Vero Beach, FL  
November 4, 2011**

**Short Term Drought Map:**

**U.S. Drought Monitor**  
**Florida**

**November 1, 2011**  
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	62.98	37.02	26.16	18.36	7.98	0.00
Last Week (10/25/2011 map)	63.01	36.99	24.61	15.06	7.98	0.00
3 Months Ago (08/02/2011 map)	11.34	88.66	65.92	47.37	17.72	0.00
Start of Calendar Year (12/28/2010 map)	0.18	99.82	86.04	50.84	20.21	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 (10/26/2010 map)	21.24	78.76	41.73	23.98	3.91	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, November 3, 2011  
Brian Fuchs, National Drought Mitigation Center

**Synopsis:** Long term drought conditions continue over northern Florida. Short term and long term deficiencies have improved across most of central and southern Florida. Early in the month a strong area of high pressure was situated over the southeastern U.S. and a weak frontal boundary lingered over central and southern Florida. This enhanced moisture and brought heavy rains. On October 8, Vero Beach set a new daily rainfall record of 8.30 inches, Orlando had 6.16 inches, and Melbourne had 5.68 inches. Also, on that day, the Kissimmee basin experienced the heaviest rain in nearly 100 years with an average total of 6.05 inches and isolated maximums of 14.09 inches. On October 14, another round of very heavy rainfall began moving northward from a tropical disturbance located between the Yucatan Peninsula and western Cuba. Rainfall moved across the state and lasted for 5 days through October 19. Then from October 28-31, a cool front

stalled over South Florida and entrained moisture from the remnants of Hurricane Rina. This led to heavy rain and flooding. From that event, Miami/Ft. Lauderdale received 10-12 inches of rain, West Palm Beach area had 8-15 inches and Naples received 5-7 inches of rain. Vero Beach set a new monthly rainfall total of over 21 inches. Other cities also broke records, including Melbourne 9.54 inches, Fort Pierce at 16.47 inches, Miami and Ft. Lauderdale 15.52 inches, West Palm Beach 9.89 inches, and Naples 8 inches.

## South Florida Water Depth Assessment Tool (SFWDAT) – Everglades

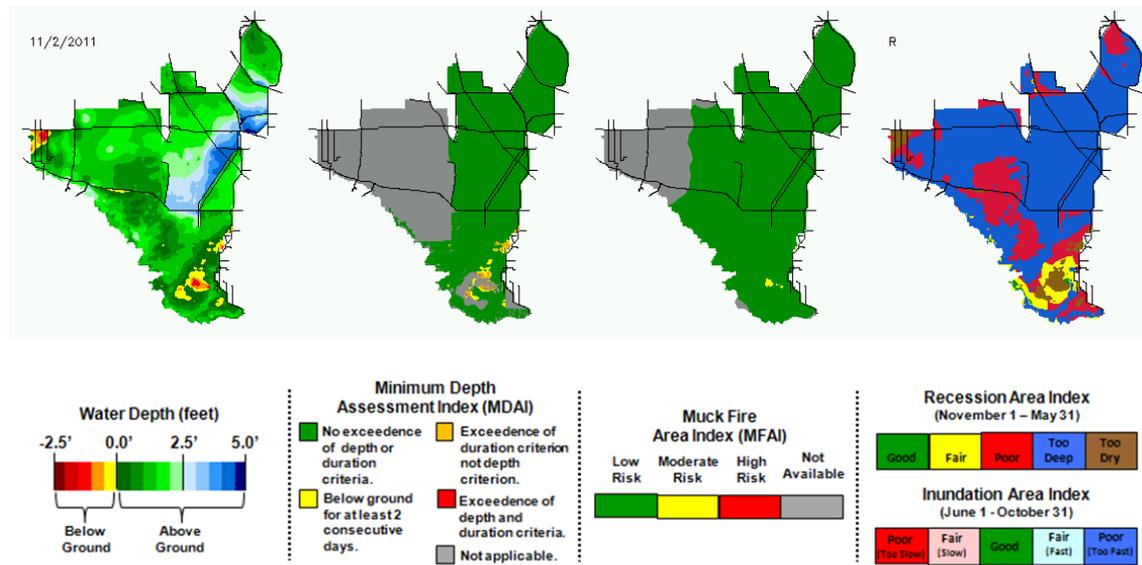
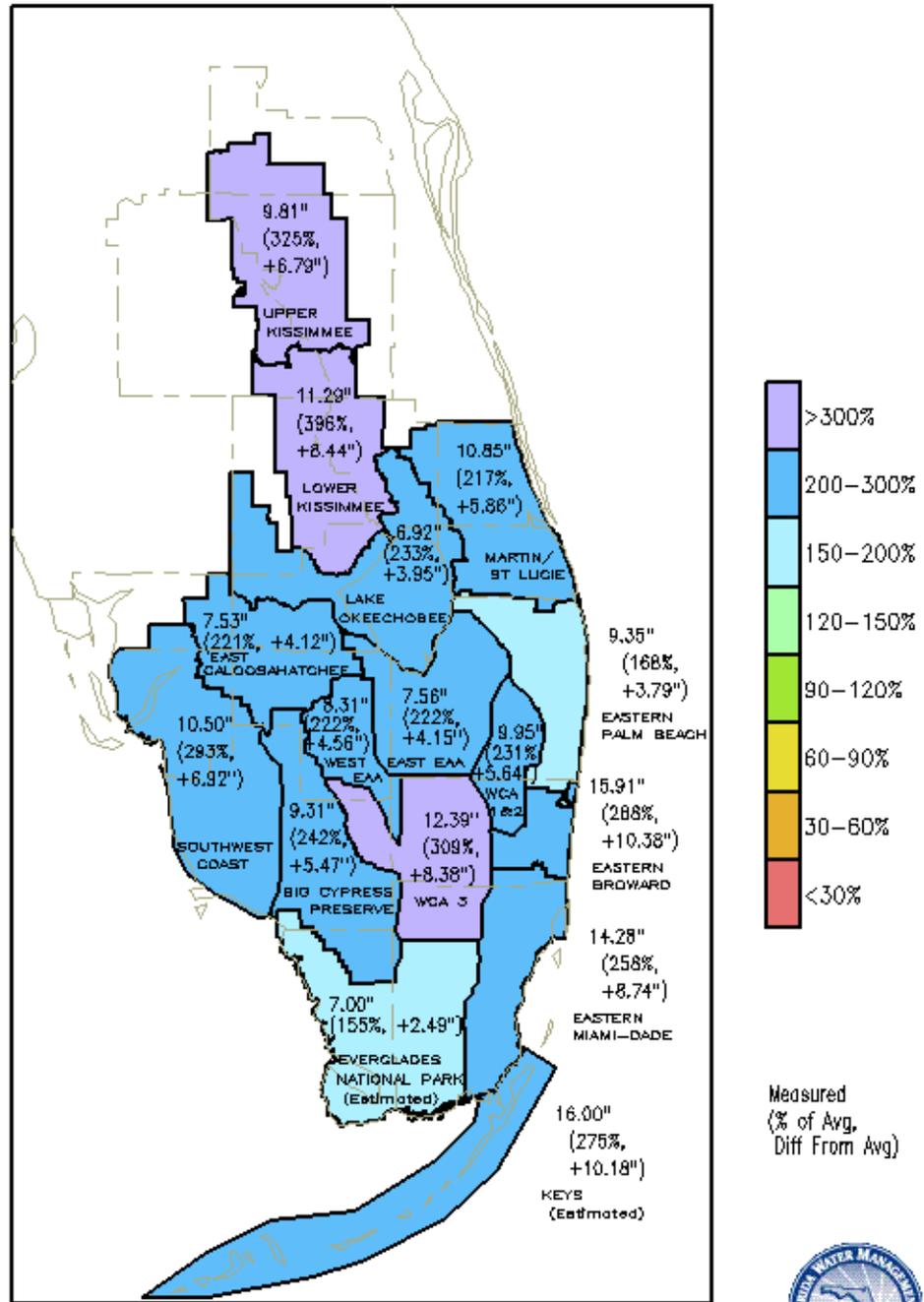


Figure 2 – Current water depths, muck fire hazards, and recession rates for the Everglades.

# SFWMD Rainfall 02-Oct-2011 to 01-Nov-2011



DISTRICT-WIDE: 9.98" (264%, +6.20")



GrADS: COLA/IGES

Figure 3 - Rain totals for the month of October 2011.

## **Drought Impacts in the News:**

**None for the month of October.**

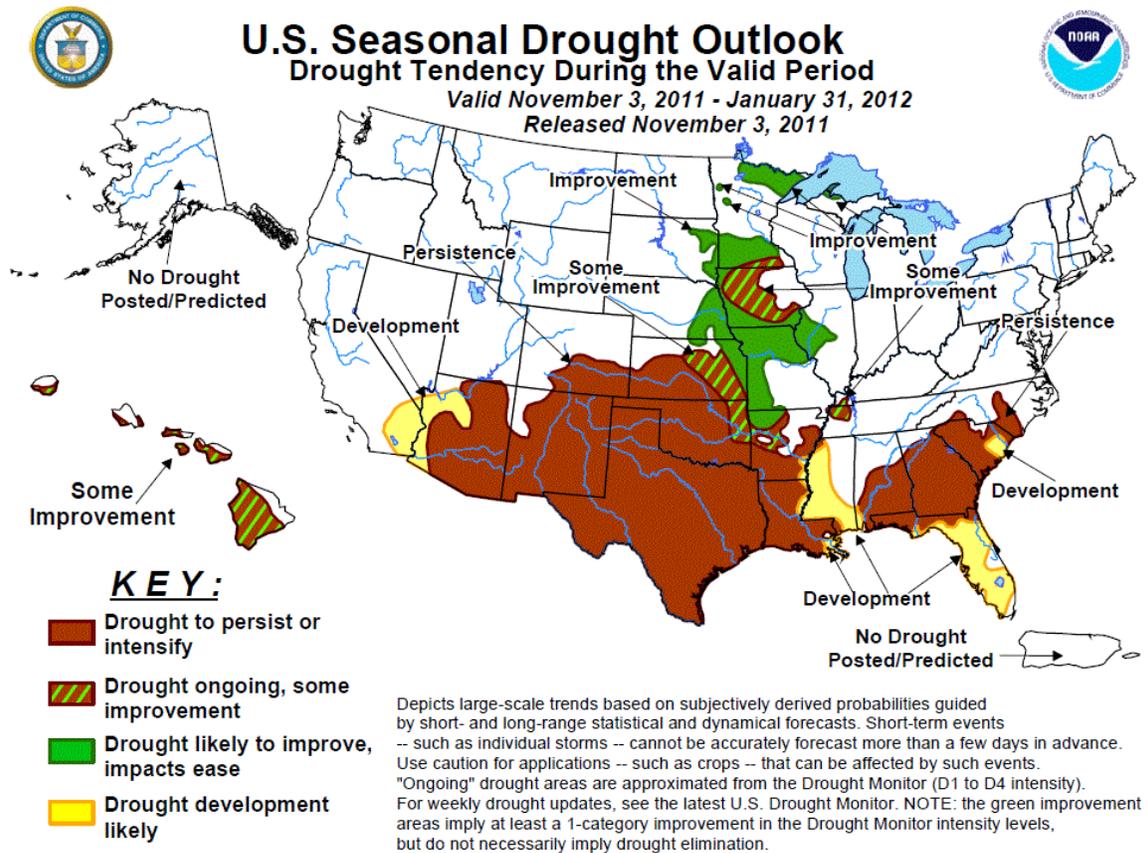
### **2011 Wet Season Totals (since June 1):**

Upper Kissimmee Chain of Lakes: 40" (+9.4" above normal rain)  
Lower Kissimmee Chain of Lakes: 36.2" (+6.8" above normal rain)  
Lake "O": 29" (+.90" above normal rain)  
St. Lucie basin: 36.4" (+2.8" above normal)  
Caloosahatchee basin: 38.5" (+2.6" above normal rain)  
EAA: 34.8" (+3.7" above normal)  
Southwest Florida: 43.6" (+3.9" above normal rain)  
Coastal Palm County: 36.5" (-.40" below normal rain)  
Coastal Broward County: 41.5" (+5.3" above normal rain)  
Lox & WCA-2: 35.9" (+4.3" above normal rain)  
WCA-3: 41.7" (+8.5 above normal)  
Coastal Dade County: 42.6" (+4.5" above normal rain)  
Big Cypress: 41.1" (+3.3" above normal rain)

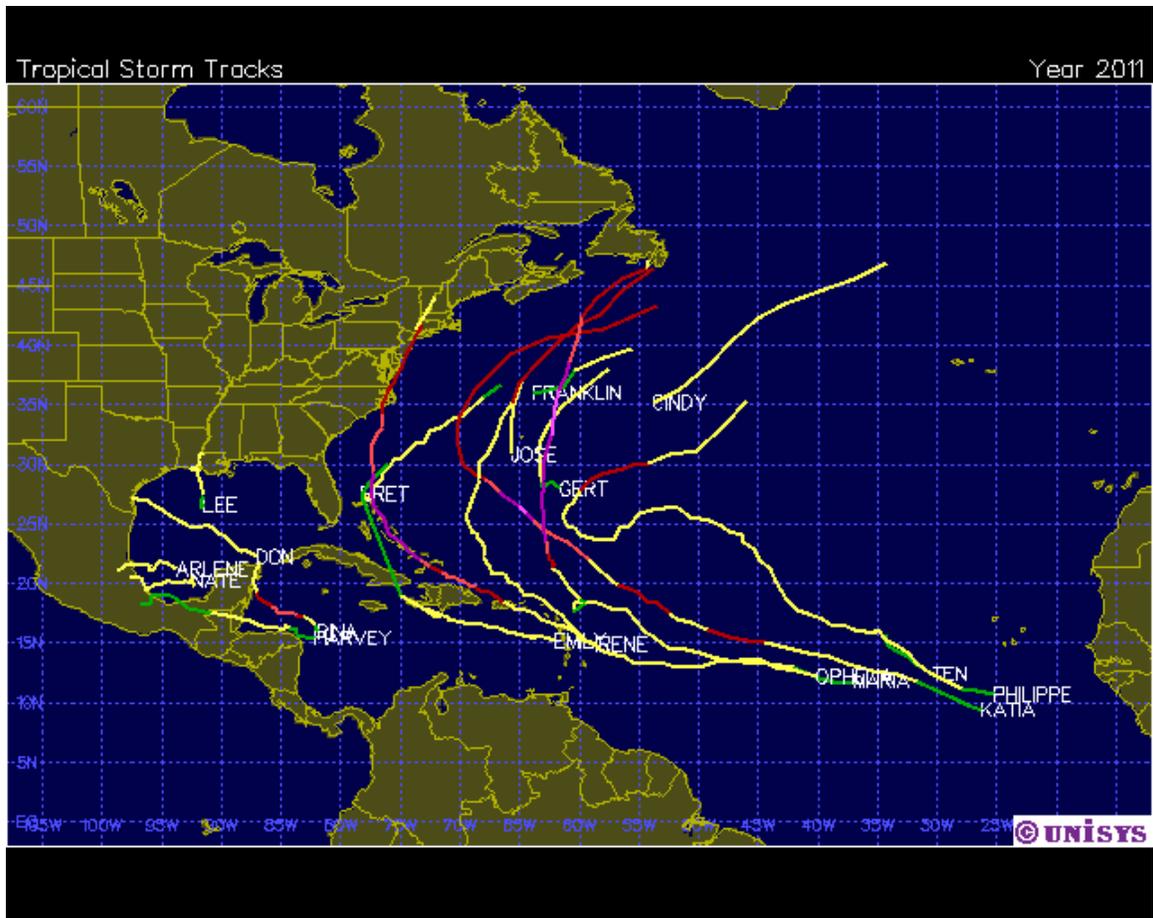
### **2011 Yearly Totals (since January 1):**

Upper Kissimmee Chain of Lakes: 54.3" (+9.6" above normal rain)  
Lower Kissimmee Chain of Lakes: 46.4" (+3.9" above normal rain)  
Lake "O": 37.6" (-3.2" below normal rain)  
St. Lucie basin: 45.9" (-3" below normal rain)  
Caloosahatchee basin: 47.9" (-1.4" below normal rain)  
EAA: 44" (-.30" below normal rain)  
Southwest Florida: 53.3" (+.20" above normal rain)  
Coastal Palm County: 45.4" (-9.6" below normal rain)  
Coastal Broward County: 50.1" (-2.4" below normal rain)  
Lox & WCA-2: 44.5" (-1.3" below normal rain)  
WCA-3: 48.9" (+2.3" above normal rain)  
Coastal Dade County: 50.1" (-1.8" below normal rain)  
Big Cypress: 49.8" (-1.3" below normal rain)  
Middle Keys: 35.5" (-6.3" below normal rain)  
Lower Keys: 42.1" (+6.5 above normal rain)

## Drought Outlook for the Next 3 Months:



**Figure 4 – After record breaking rainfall in October 2011, a return to very dry conditions is expected with the return of La Nina for the 2011-2012 dry season.**



**Figure 5 - 2011 Hurricane Season tracks to date in 2011. Tracks are very reminiscent of 2010 tracks.**

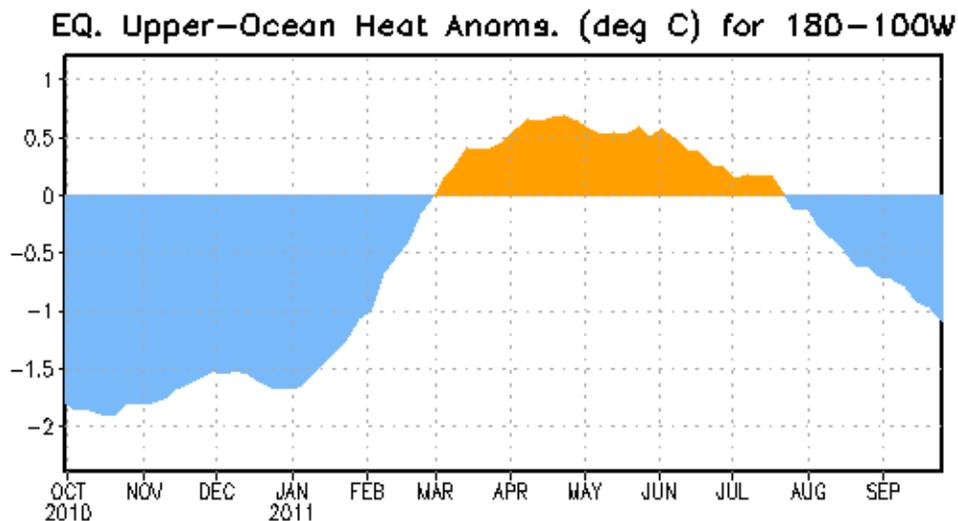
**2011 Atlantic Hurricane Season Outlook:**

Cyclone	Normal	12/8/2010 Issued Forecast	4/6/2011 Issued Forecast	6/1/2011 Issued Forecast	8/3/2011 Issued Forecast	12/1/2011 Season Recap		
Named Storms	10	17	16	16	16			
Hurricanes	6	9	9	9	9			
Major Hurricanes	2	5	5	5	5			

**Table 1 – Tropical system forecasts issued by Colorado State University throughout the hurricane season.**

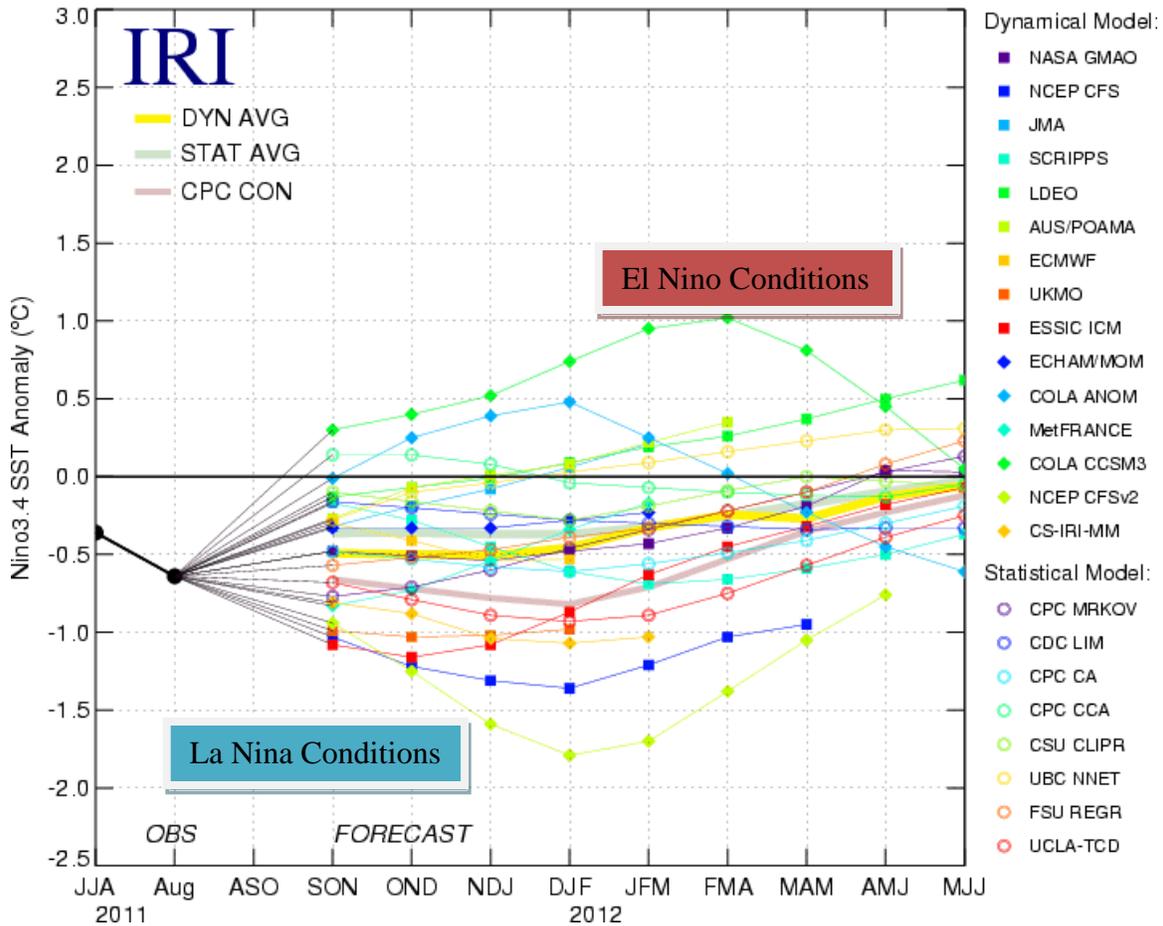
**El Nino / La Nina (ENSO) Status – La Nina 2011/2012 Advisory is in effect  
(Climate Prediction Center)**

Sea surface temperatures in the eastern tropical Pacific Ocean continue to cool and other oceanic and atmospheric conditions indicate the return of La Niña conditions for this dry season. Currently, La Nina is not as strong as it was one year ago. Fifty percent of the climate models indicate La Nina will strengthen during the fall months and the majority of this 50% agree that La Nina will remain weak. Also supporting La Niña conditions is the statistical return frequency (60%) of a secondary weaker La Nina following a strong La Nina. These statistics date back to 1950. However, the best performing model this past summer (NCEP CFS v.1) predicts a moderate La Nina this dry season and NCEP CFS v.2 predicts a strong La Nina rivaling last year's La Nina peak strength. The average La Nina forecast error is  $\pm .5^{\circ}\text{C}$ , thus the Climate Prediction Center is forecasting a weak to moderate La Nina for the 2011-2012 winter.



**Figure 6 – La Nina induced cooler sea surface temperatures are apparent last winter with a return of warmer temperatures with the ENSO-neutral conditions this summer. Since August, sea surface temperatures have been cooling, which indicates a return of La Nina for the upcoming dry season.**

## Model Predictions of ENSO from Sep 2011



**Figure 7 - All climate model runs from September 2011.**

### Central & South Florida Temperature Outlook:

- November – Much warmer than normal
- December – Warmer than normal
- January thru March 2012 – Normal
- May 2012 – Warmer than normal
- June thru September 2012 – Much Warmer than normal
- October 2012 – Warmer than normal

### Central & South Florida Rainfall Outlook:

- November – Much drier than normal
- December thru February 2012 – Extremely drier than normal
- March thru May 2012 – Much drier than normal
- June 2012 – Drier than normal
- July 2012 – Normal
- August thru October 2012 – Much wetter than Normal

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