



**Drought Status and Climate Outlook for Upcoming 12 Months**  
**FWS SFESO – Vero Beach, FL**  
**October 5, 2011**

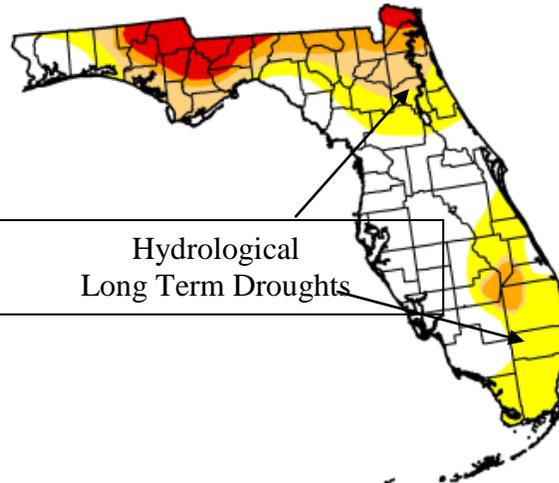
**Short Term Drought Map:**

**U.S. Drought Monitor**

**September 27, 2011**  
 Valid 7 a.m. EST

**Florida**

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	43.12	56.88	28.83	16.85	7.85	0.00
Last Week (09/20/2011 map)	46.08	53.92	28.83	16.85	7.85	0.00
3 Months Ago (06/28/2011 map)	6.53	93.47	82.96	66.48	47.59	20.65
Start of Calendar Year (12/28/2010 map)	0.18	99.82	86.04	50.84	20.21	0.00
Start of Water Year (09/28/2010 map)	54.97	45.03	18.02	4.22	0.00	0.00
One Year Ago (09/21/2010 map)	54.97	45.03	17.75	4.22	0.00	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.*

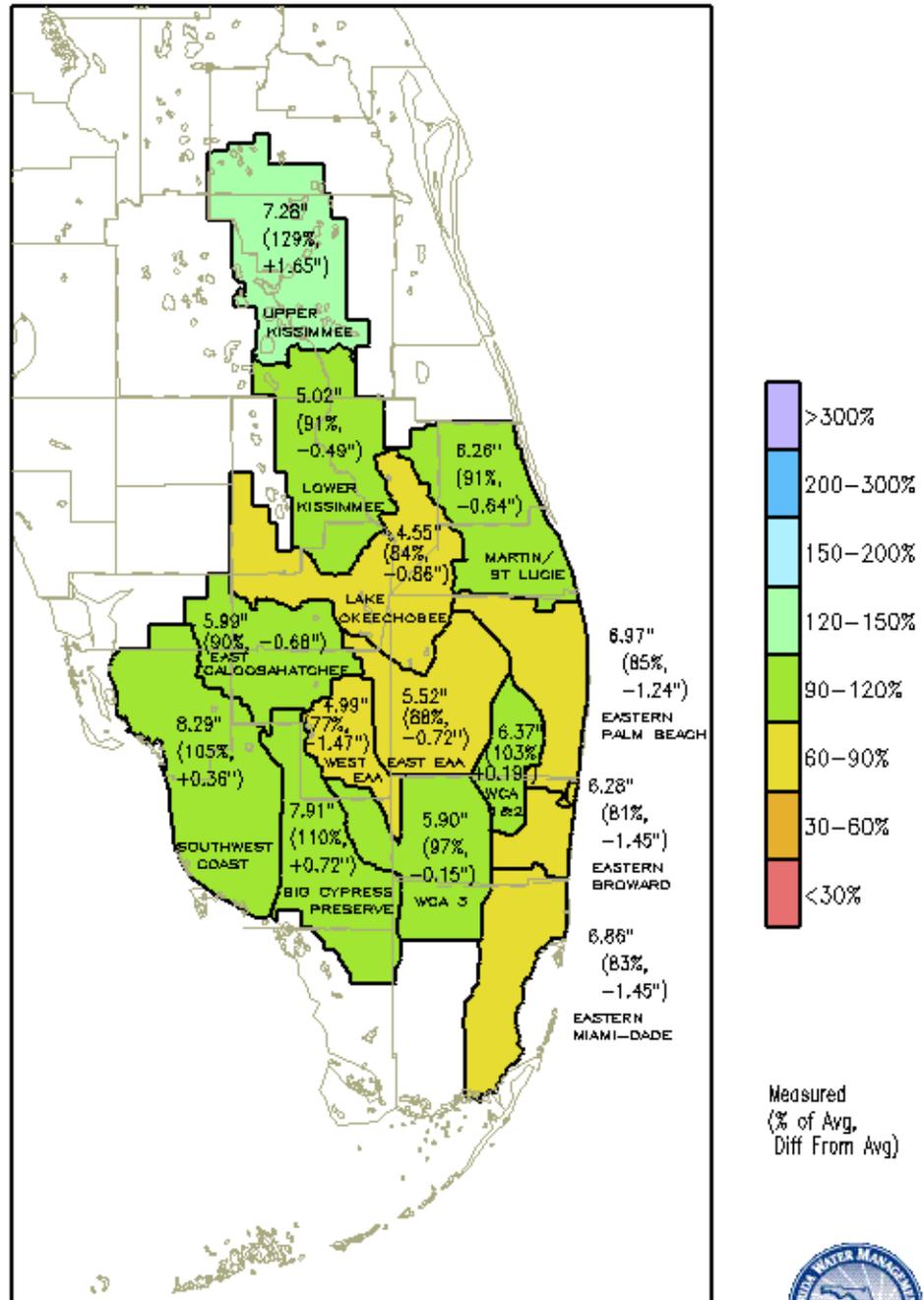
<http://drought.unl.edu/dm>



Released Thursday, September 29, 2011  
 Michael Brewer, National Climatic Data Center, NOAA

**Synopsis:** While overall agricultural drought conditions (surface) continue to improve, long term hydrologic drought conditions (sub-surface) remain over northern, eastern, and southern Florida. The wet season is winding down and these areas are still 6-12 inches below normal for the year.

## SFWMD Rainfall 02-SEP-2011 to 30-SEP-2011



**DISTRICT-WIDE: 6.39" (97%, -0.21")**

GrADS: COLA/IGES

2011-09-30-19:02



**Figure 2 - Rain totals for the month of September 2011.**

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

**Lake Okeechobee** - A wildfire began from a lightning strike on the dry bed near the Indian Prairie area of Lake Okeechobee on September 20. The fire consumed dry aquatic plants and invasive plants, such as ragweed, torpedo grass and other species, and may clear the way for native plants to return. The lake remained three feet below normal for late September, partially due to water releases in late 2010. Fort Lauderdale Sun-Sentinel & SouthFlorida.com (Fla.), Sept. 22, 2011

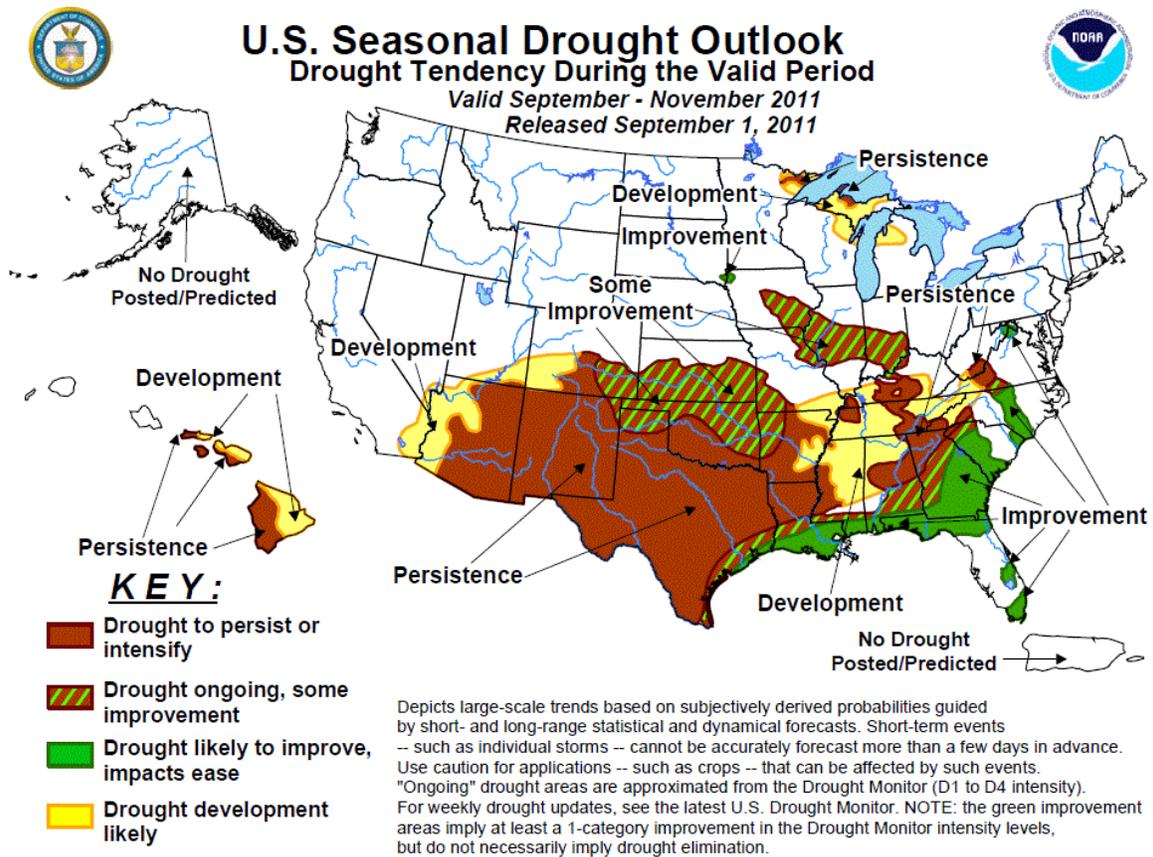
### **2011 Wet Season Totals (since June 1):**

Upper Kissimmee Chain of Lakes: 30" (+2.6" above normal rain)  
Lower Kissimmee Chain of Lakes: 25" (-1.7" below normal rain)  
Lake "O": 22" (-3" below normal rain)  
St. Lucie basin: 25.5" (normal)  
Caloosahatchee basin: 31" (-1.5" below normal rain)  
EAA: 27.2" (normal)  
Southwest Florida: 33" (-3" below normal rain)  
Coastal Palm County: 27" (-4.2" below normal rain)  
Coastal Broward County: 25.6" (-5.1" below normal rain)  
Lox & WCA-2: 26" (-1.4" below normal rain)  
WCA-3: 29.3" (normal)  
Coastal Dade County: 28.3" (-4.3" below normal rain)  
Big Cypress: 31.8" (-2.2" below normal rain)  
ENP: 29.5" (-5.2" below normal rain)  
The Keys: 17" (-2.2 below normal rain)

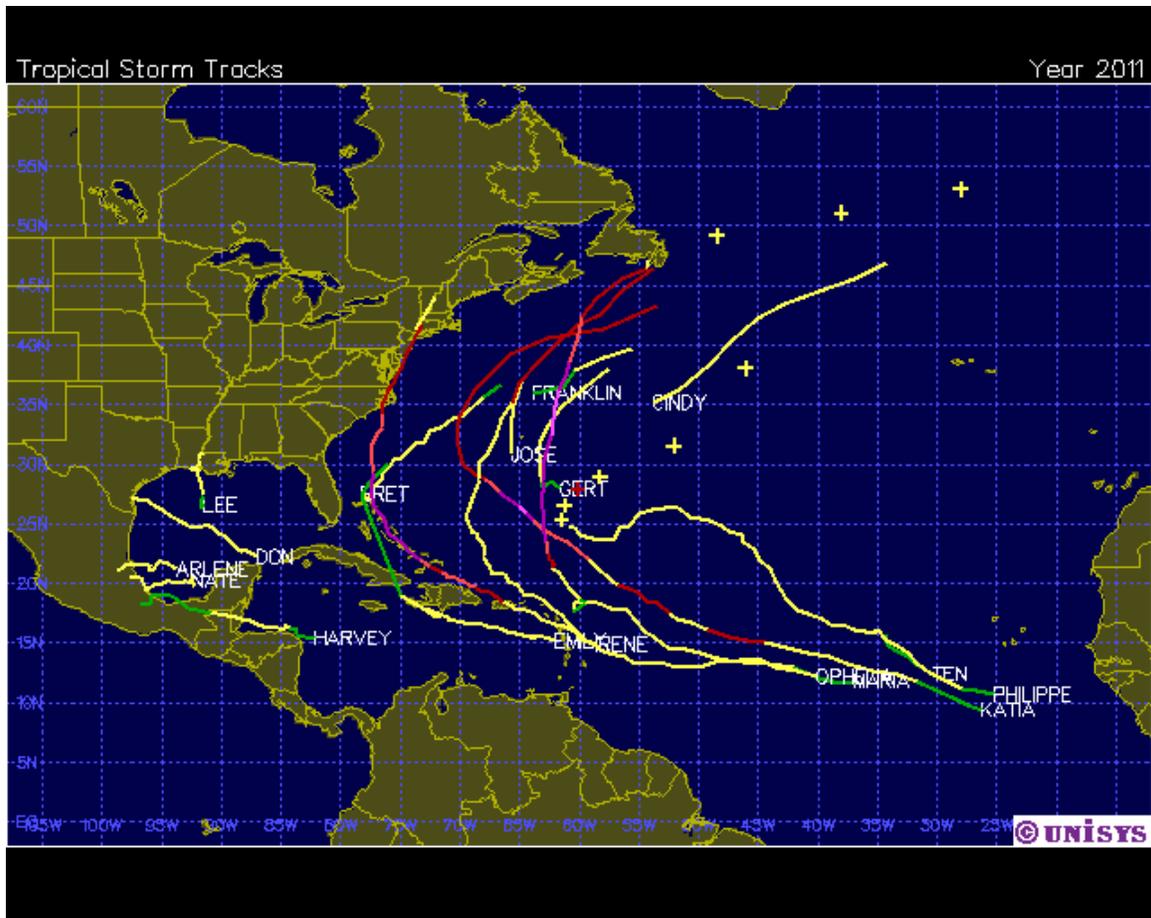
### **2011 Yearly Totals (since January 1):**

Upper Kissimmee Chain of Lakes: 44.5" (+3" above normal rain)  
Lower Kissimmee Chain of Lakes: 35" (-4.4" below normal rain)  
Lake "O": 30.7" (-7" below normal rain)  
St. Lucie basin: 35" (-8.7" below normal rain)  
Caloosahatchee basin: 40.3" (-5.3" below normal rain)  
EAA: 36.4" (-4.3" below normal rain)  
Southwest Florida: 42.8" (-6.6" below normal rain)  
Coastal Palm County: 36" (-13.2" below normal rain)  
Coastal Broward County: 34" (-12.6" below normal rain)  
Lox & WCA-2: 34.6" (-6.8" below normal rain)  
WCA-3: 36.6" (-6" below normal rain)  
Coastal Dade County: 36.7" (-10.4" below normal rain)  
Big Cypress: 40.5" (-6.6" below normal rain)  
ENP: 37.5" (-10" below normal rain)  
The Keys: 22.5" (-7.2" below normal rain)

## Drought Outlook for the Next 3 Months:



**Figure 3 – Rainfall is expected to bring drought improvements to the Florida Peninsula during October. Improvements will likely end with the predicted return of La Nina for the 2011-2012 dry season.**



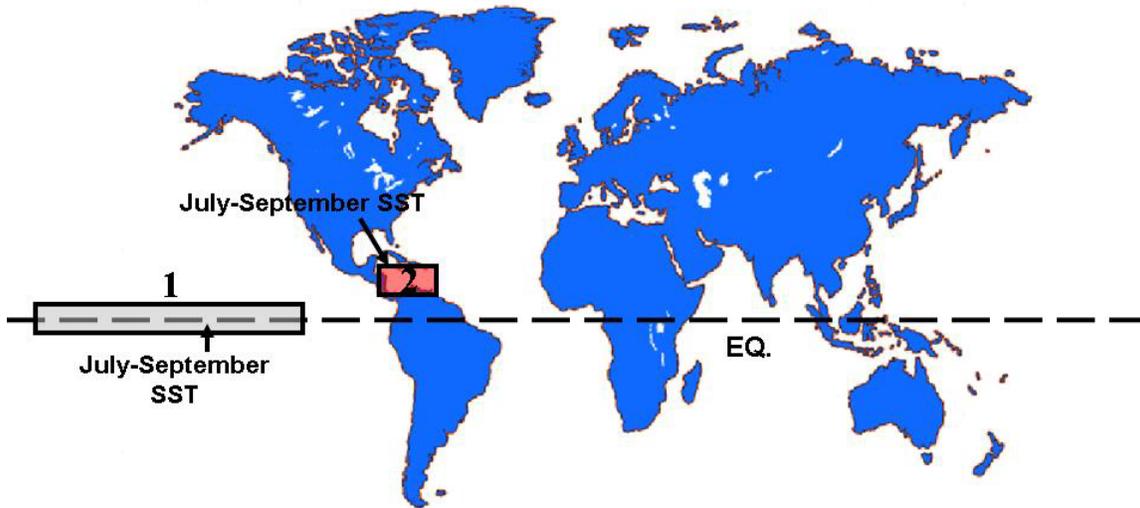
**Figure 4 - 2011 Hurricane Season tracks to date in 2011. Tracks are very reminiscent of 2010 tracks.**

### **2011 Atlantic Hurricane Season Outlook:**

**September 30 Colorado State Caribbean Tropical Update** - Figure 5 displays the predictors selected for the September 30<sup>th</sup> forecast. More Caribbean activity typically occurs when predictor 1 is colder than normal, and predictor 2 is warmer than normal.

La Niña conditions are associated with reduced vertical wind shear across the Caribbean (more favorable dynamic conditions), while a warmer Caribbean is associated with more favorable thermodynamic conditions. Consequently, since both parameters are in a hurricane-favorable mode this year, an active late season in the Caribbean is expected.

## October-November Caribbean Forecast Predictors



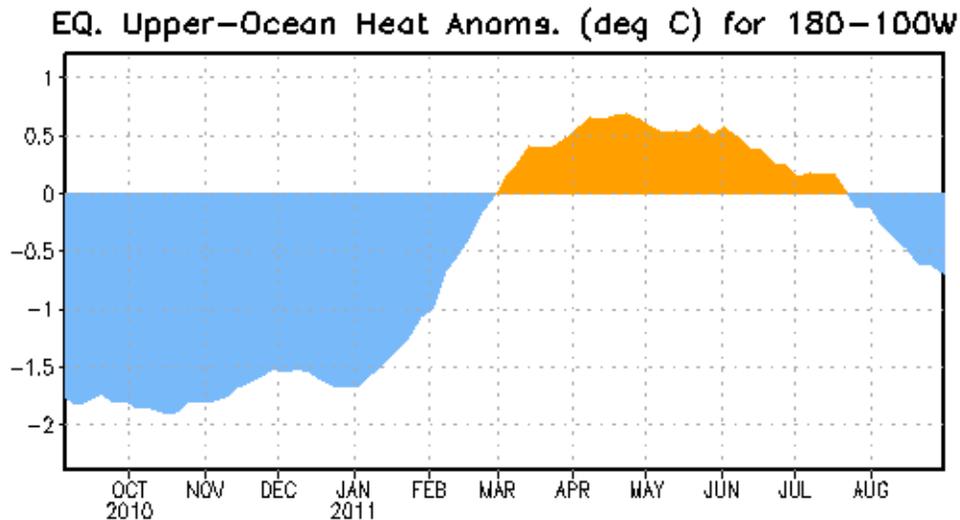
**Figure 5: Predictors selected for forecasting October-November Caribbean basin hurricane activity. Predictor 1 area is the July through September sea surface temperatures in the equatorial eastern Pacific Ocean. Predictor 2 area is the July through September sea surface temperatures in the Caribbean Sea.**

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			

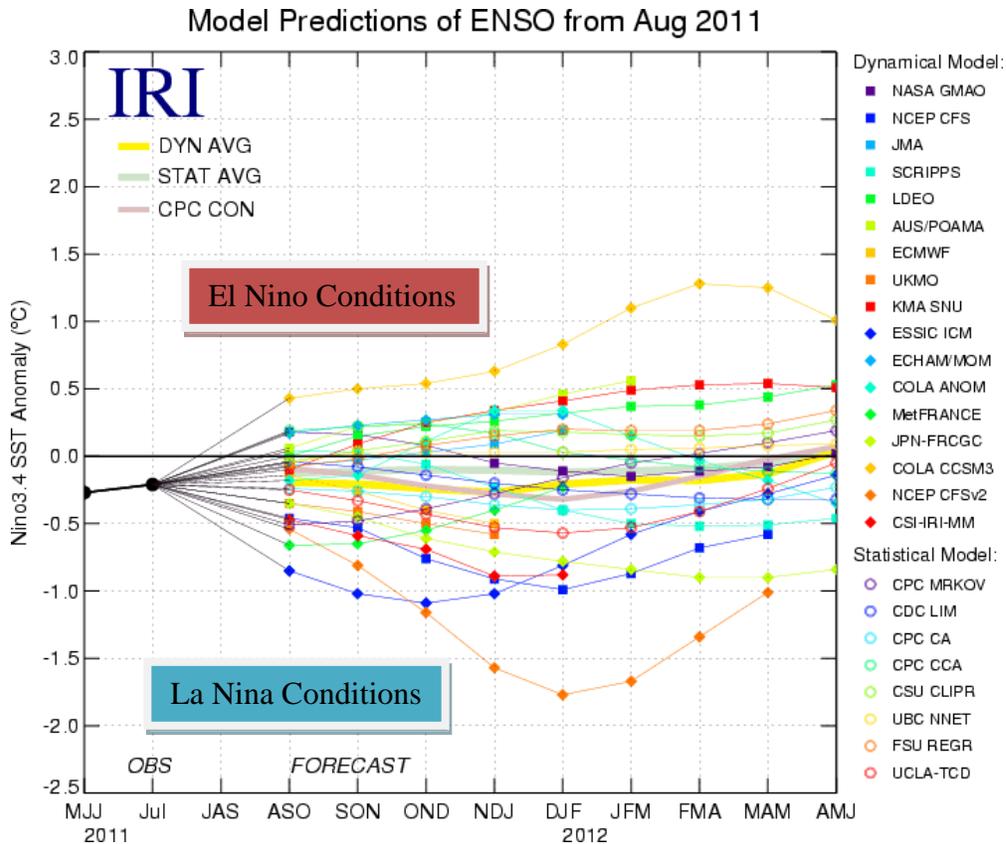
**Table 1 – Tropical system forecasts issued by Colorado State University throughout the hurricane season.**

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

La Niña conditions returned in August 2011 due to the cooling of sea surface temperatures across the eastern half of the equatorial Pacific Ocean (see Figure 6). Also supporting the return of La Niña conditions was the cooling of the subsurface regions in response to increased upwelling of the thermocline across the eastern Pacific Ocean. Atmospheric circulations over the region have continued to exhibit La Niña characteristics throughout the summer months.



**Figure 6 – La Niña 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 Niña for the upcoming dry season.**



**Figure 7 - All climate model runs from August 2011. Most models continue to predict that ENSO-Neutral conditions will continue through winter 2012.**

**Central & South Florida Temperature Outlook:**

- October thru December – Cooler than Normal
- January thru April 2012 – Normal
- May 2012 – Warmer than Normal
- June thru September 2012 – Much Warmer than Normal

**Central & South Florida Rainfall Outlook:**

- October – Normal
- November – Drier than Normal
- December – Excessively Drier than Normal
- January 2012 thru April 2012 – Extremely Drier than Normal
- May 2012 – Drier than Normal
- June 2012 – Normal
- July 2012 thru August 2012 – Wetter than Normal
- September 2012 – Excessively Wetter than Normal

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