Drought Status and Climate Outlook for Upcoming 12 Months
FWS SFESO – Vero Beach, FL
May 7, 2012

Short Term Drought Map:

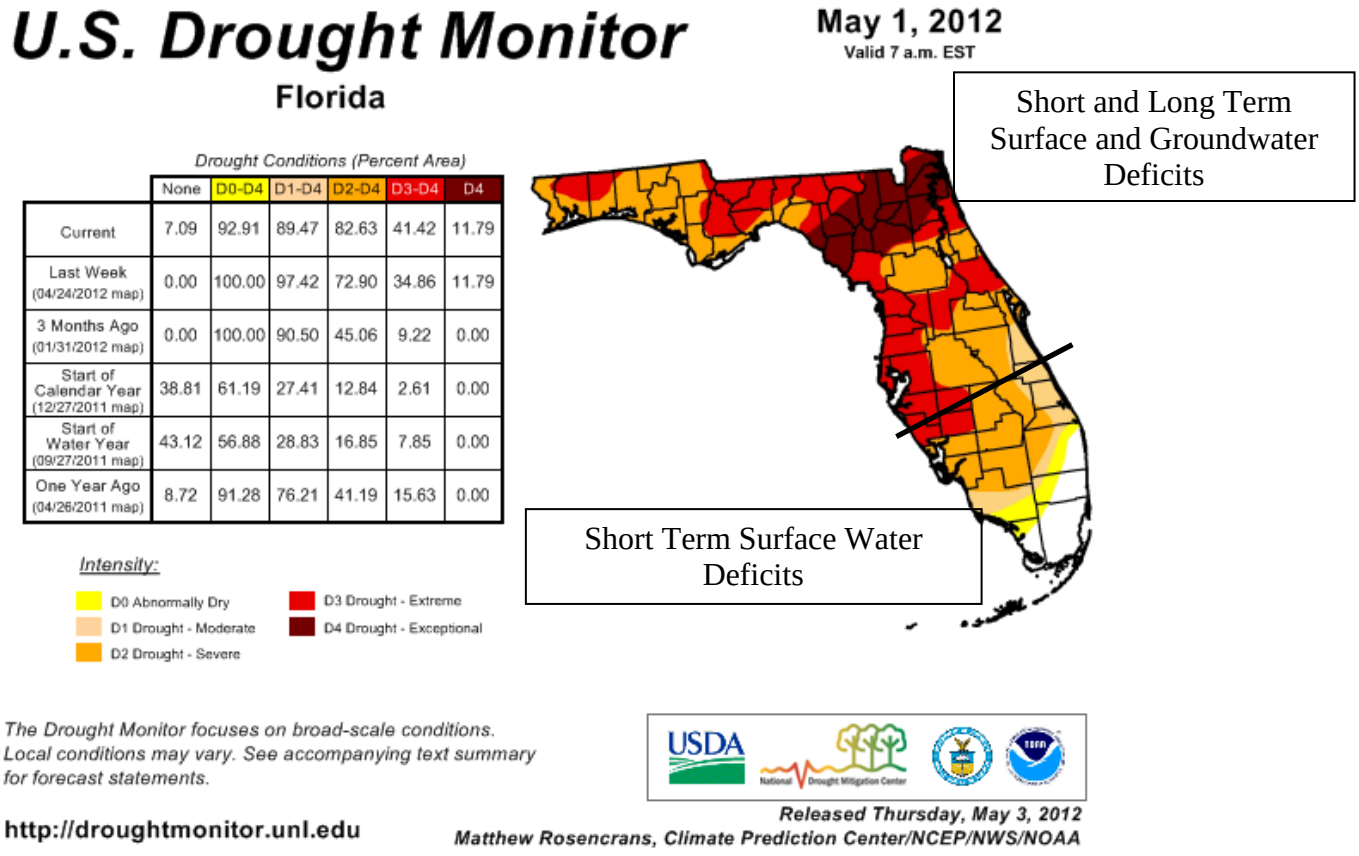


Figure 1 – U.S. Drought Monitor for the State of Florida.

Synopsis: Short and long-term surface and groundwater drought conditions continue to worsen across most of the state with exceptional drought conditions developing across northeastern Florida. Extreme drought conditions have developed over much of the northern two thirds of the state. South Florida received heavy rains of about 3-5 inches a

week ago which helped areas south of Lake Okeechobee improve to only short-term surface water deficits.

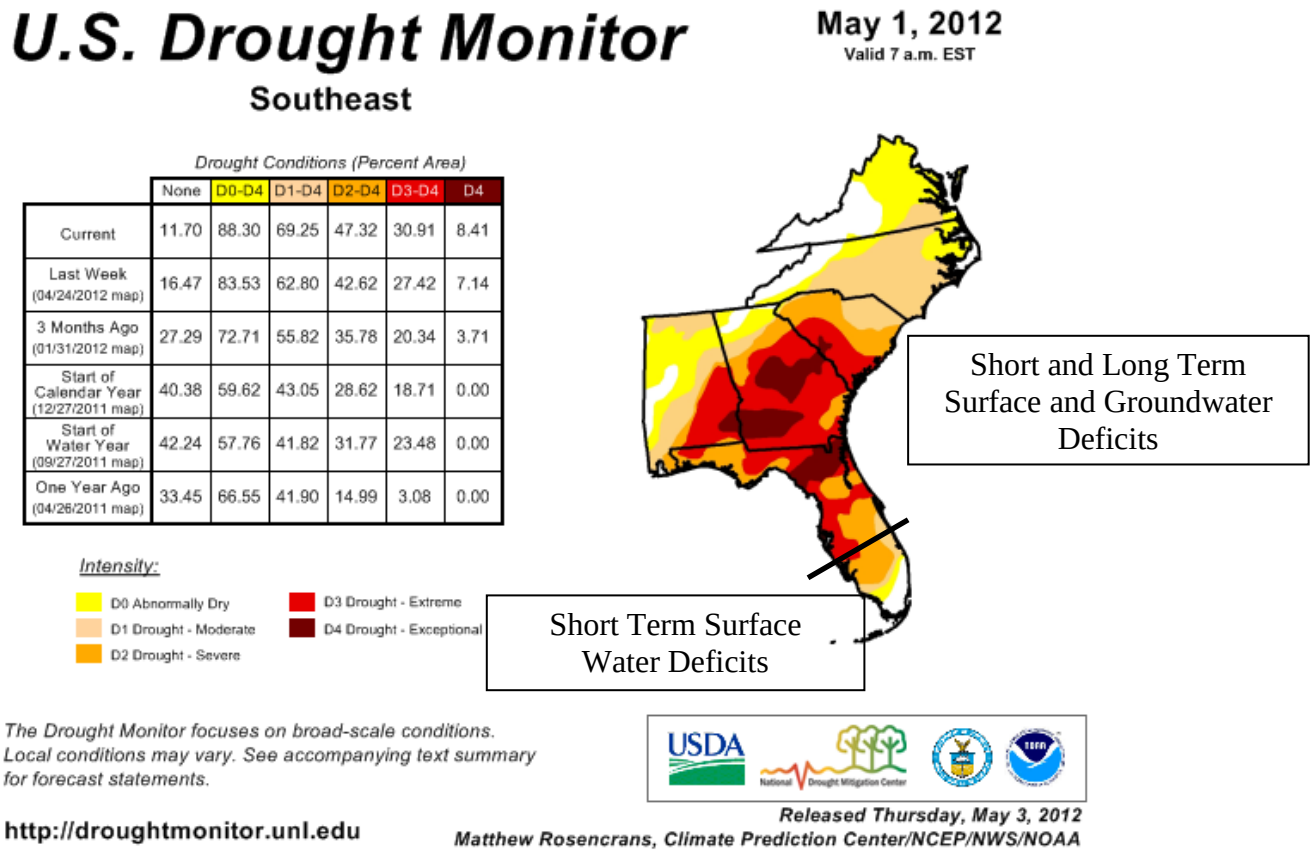


Figure 2 – U.S. Drought Monitor for the Southeast Region.

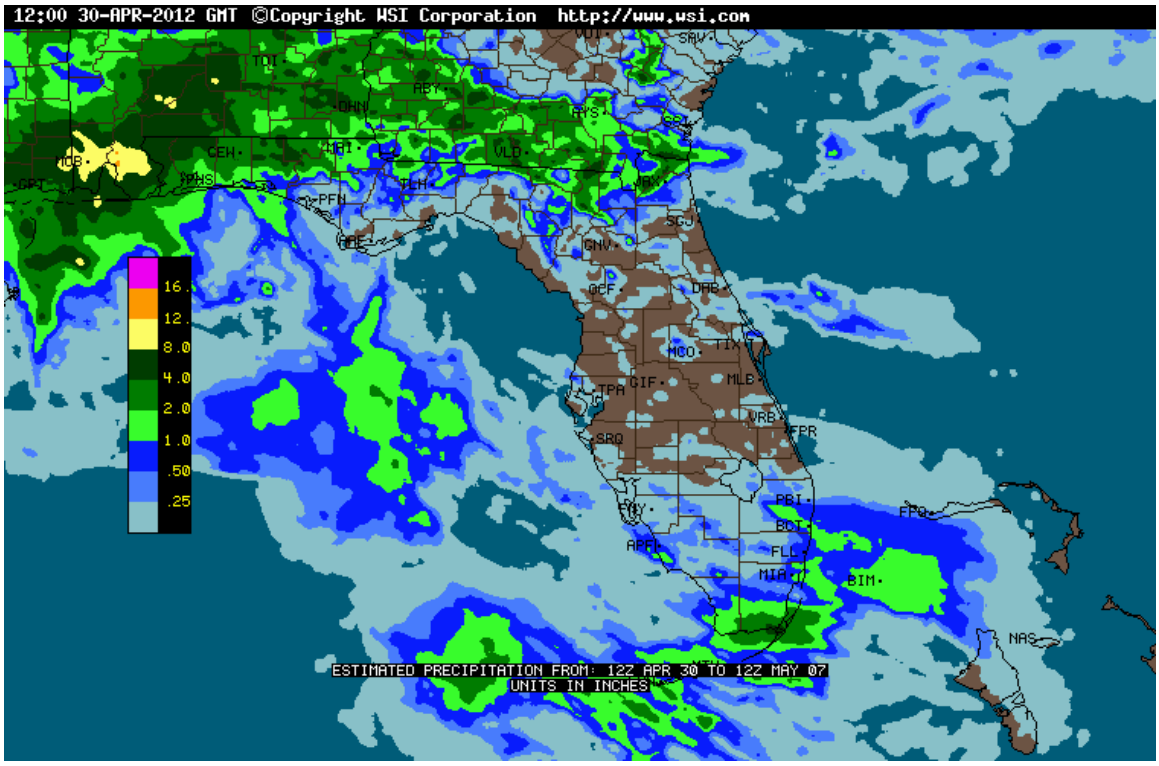
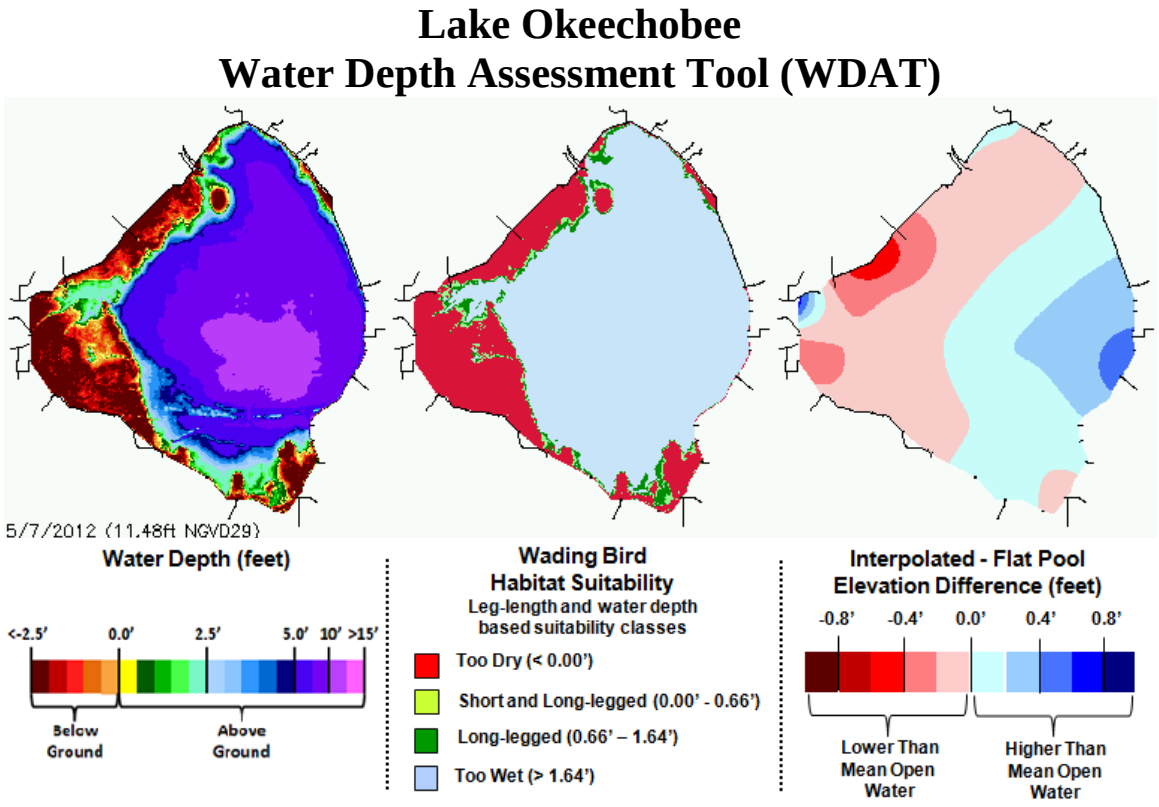


Figure 3 – Cold front induced rainfall for the week ending Monday morning, May 7, 2012.



Everglades
South Florida Water Depth Assessment Tool (SFWDAT)

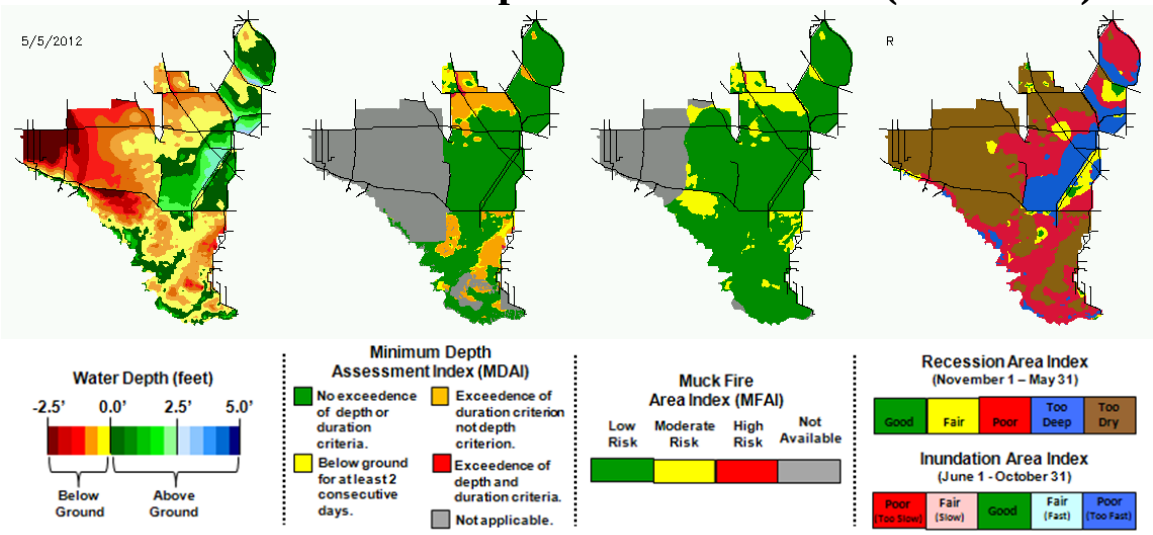


Figure 4 – SFWMD South Florida Water Depth Assessment Tool (SFWDAT) current water depths and wading bird habitat suitability for Lake Okeechobee. Current water depths, muck fire hazards, and wading bird recession rates for the Everglades.

Low Lake Okeechobee water levels have led to the drying of the littoral zone with only a thin rim of vegetation remaining. Loxahatchee NWR and the WCAs received some much needed rainfall (3-5 inches) about a week ago which has improved some short-term surface water deficits. Otherwise, much of the remaining Everglades are dry including northern and central WCA-3A and ENP. Ponding continues to occur in southern and eastern WCA-3A.

Drought Impacts in the News:

Water Conservation Alert
In effect beginning April 27, 2012

Area Affected – west-central and southwest Florida.

A Phase Three Severe Water Shortage continues for Levy, Citrus, Hernando, and Sumter counties. Elsewhere across west central and southwest Florida a Phase One Moderate Water Shortage remains in effect. Water restrictions are in effect for all counties in west central and southwest Florida. NWS - Drought Information Statement - Tampa Bay Area, Florida - April 27, 2012

Lake Okeechobee Navigation and Low Water
In effect beginning April 27, 2012

Area Affected – Lake Okeechobee.

The Corps of Engineers of Florida have closed some locks along Lake Okeechobee because of the low water in the lake. The locks that are closed are S-135 at J and S Fish Camp in Martin County, G-35 at Hendry Creek in Okeechobee County, S-127 at Buckhead Ridge in Glades County, and S-131 at Lakeport in Glades County. The South Florida Water Management District has kept all of south Florida in a yearly water restriction, which reduces water usage to 3 days a week. They have also continued the water shortage warning. NWS - Drought Information Statement - Miami, Florida - April 27, 2012

Wildfires
April 24, 2012

The Florida Forest Service director briefed the governor and his cabinet members on the upcoming fire season. There is a higher likelihood of wildfires in June and July, given the prolonged drought. In the previous week, there were 91 fires affecting 39,000 acres. Of those 91 fires, 16 have burned more than 100 acres. Tallahassee Democrat & Tallahassee.com (Fla.), April 24, 2012

Drought conditions prevented Florida authorities from accomplishing as much prescribed burning as they would have liked to do, according to the state's agriculture commissioner. Palm Beach Post (Fla.), April 24, 2012

Wildlife
April 23, 2012
Area Affected – The Everglades

Wildlife in the Everglades was doing its best to cope with the dry conditions as more than 70 percent of the refuge had less than 12 inches of water. Roughly 75 percent of the marshes bordering Lake Okeechobee were dry, reducing the amount of habitat available for apple snails, a staple in the diet of endangered Everglades snail kites. Alligators create their own indentations in the mud, which fill up with water, offering treacherous relief for birds, turtles and wading birds. There were fewer than 4,000 wading birds, such as endangered wood storks, great blue heron, egrets and ibis this spring, in comparison with roughly 12,000 in 2011. The use of airboats was prohibited in northern parts of the Everglades because there was too little water. Precipitation has been less than half of normal since November 2011 in South Florida. As a result, Lake Okeechobee and the Everglades have less water, leaving the wildlife to adjust to the conditions. Fort Lauderdale Sun-Sentinel & SouthFlorida.com, April 23, 2012

State of Emergency – Oviedo, FL
In effect – May 2 through May 31

There was a state of emergency declaration for the city of Oviedo due to the dearth of rain and increased fire danger. All outdoor burning was prohibited, but

the use of fire pits and barbeque grills was allowed. The state of emergency will expire in 30 days. Bay News 9 (Fla.), May 2, 2012

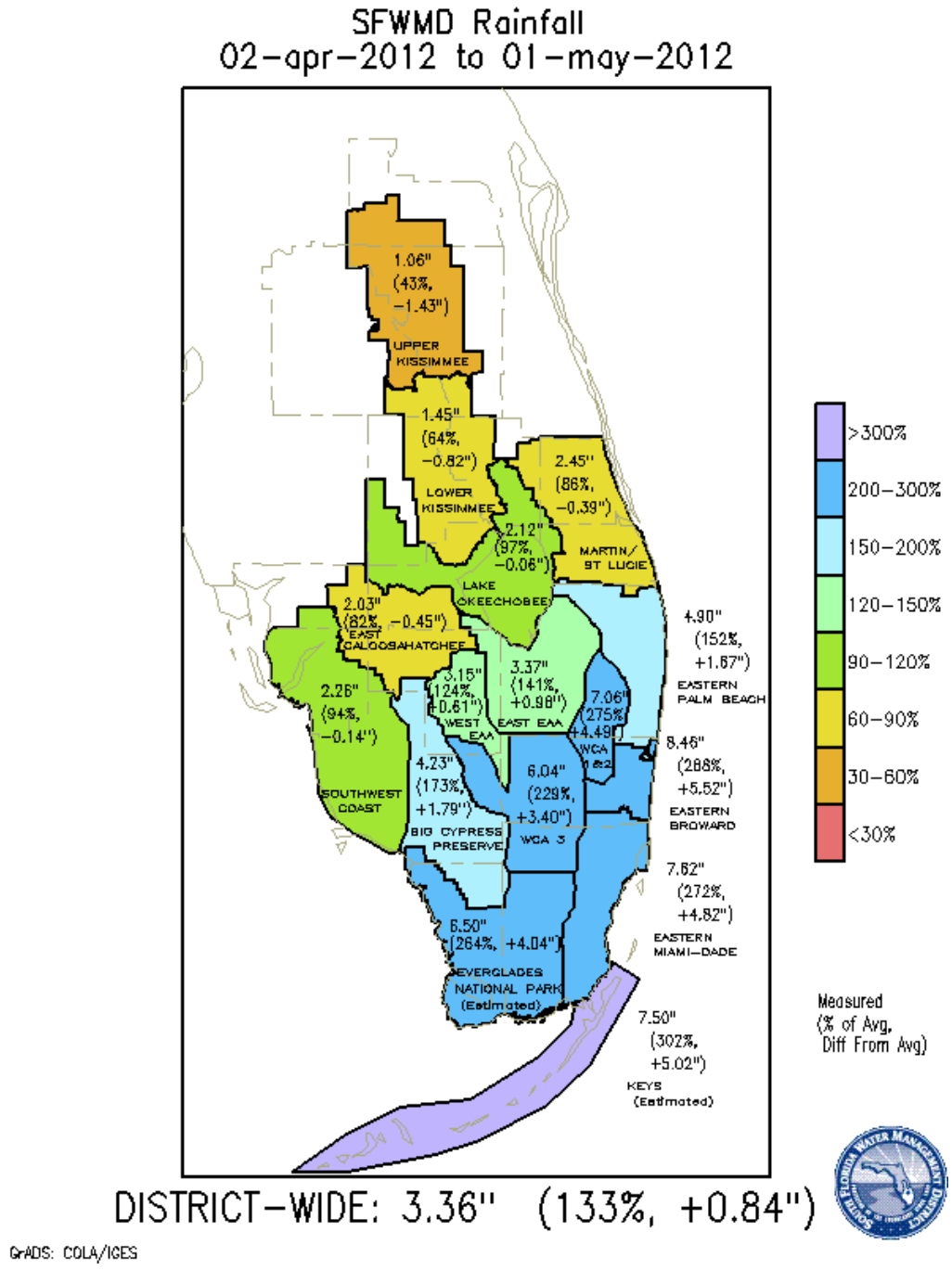


Figure 5 – South Florida Water Management District rain totals for the month of April 2012. Much needed rainfall fell across South Florida late in April and early May.

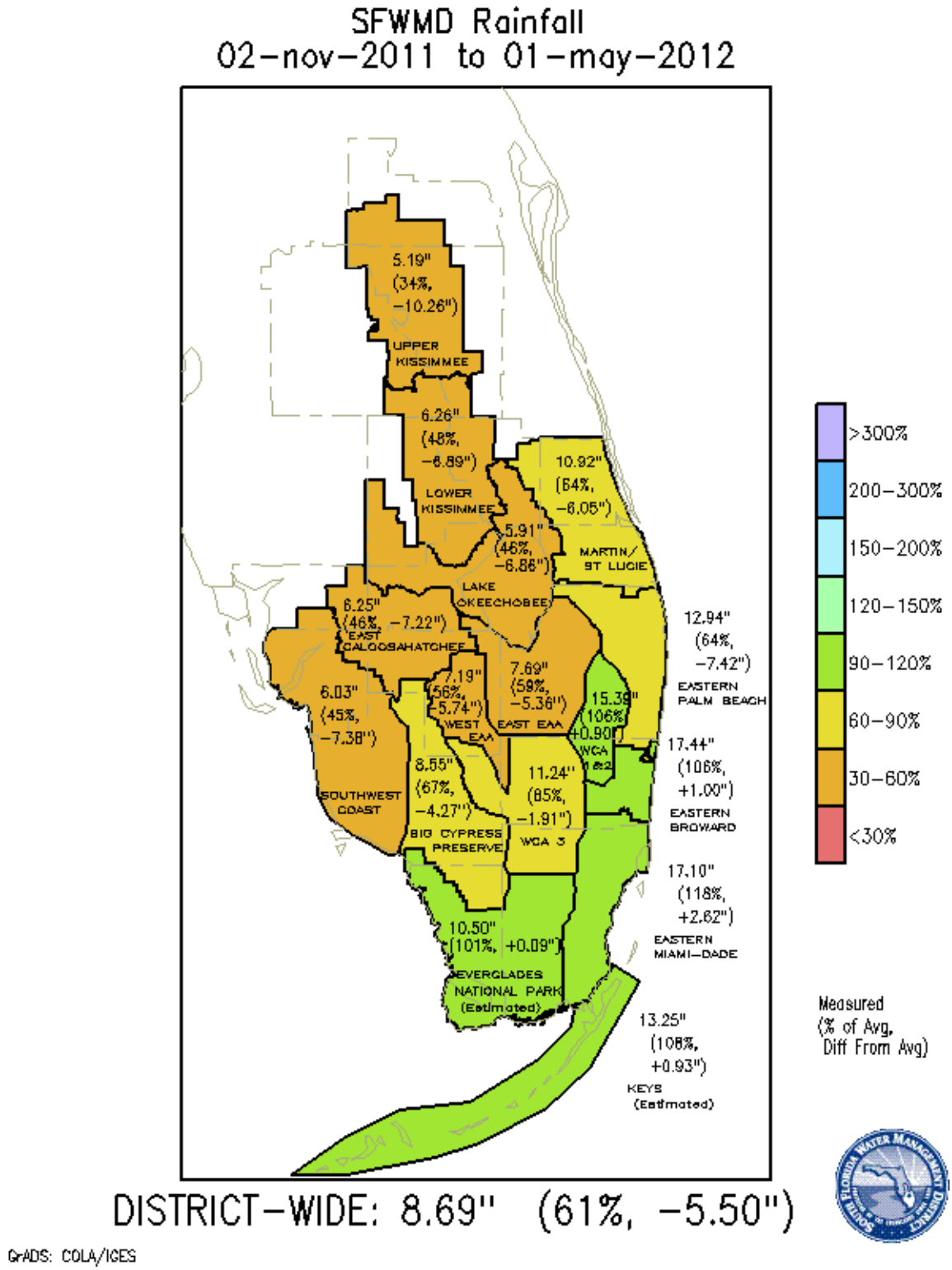


Figure 6 – South Florida Water Management District Dry Season rainfall totals from November 2011 through April 2012. Only 60% of normal rainfall has occurred with a majority of that rainfall falling in late April and early May.

Drought Outlook for the Next 3 Months:

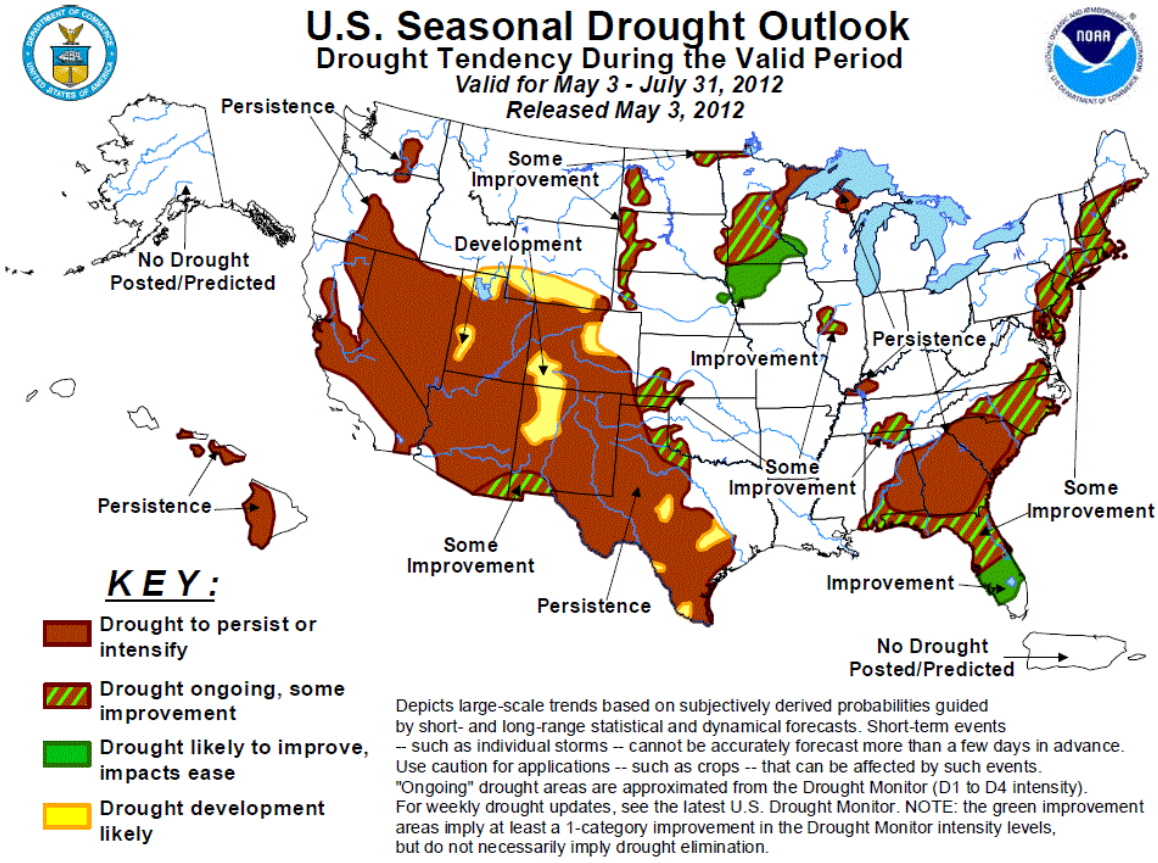


Figure 7 – Drought improvement has occurred over South Florida due to heavy rains in late April. As the wet season approaches, drought improvements are expected across the remainder of Florida.

El Nino / La Nina (ENSO) Status – Final La Nina Advisory is in effect for June. (Climate Prediction Center)

La Niña dissipated in April with a return to ENSO-neutral. This transition is indicated by the continued warming of the equatorial Pacific Ocean since January / February, 2012 when La Nina peaked.

A majority of models predict ENSO-neutral conditions will continue through the summer months. Thereafter, there is considerable uncertainty in the forecast. Models predict about a 50/50 percent chance for either ENSO-Neutral conditions to continue or an El Nino event to develop in the fall months (see Figure 8).

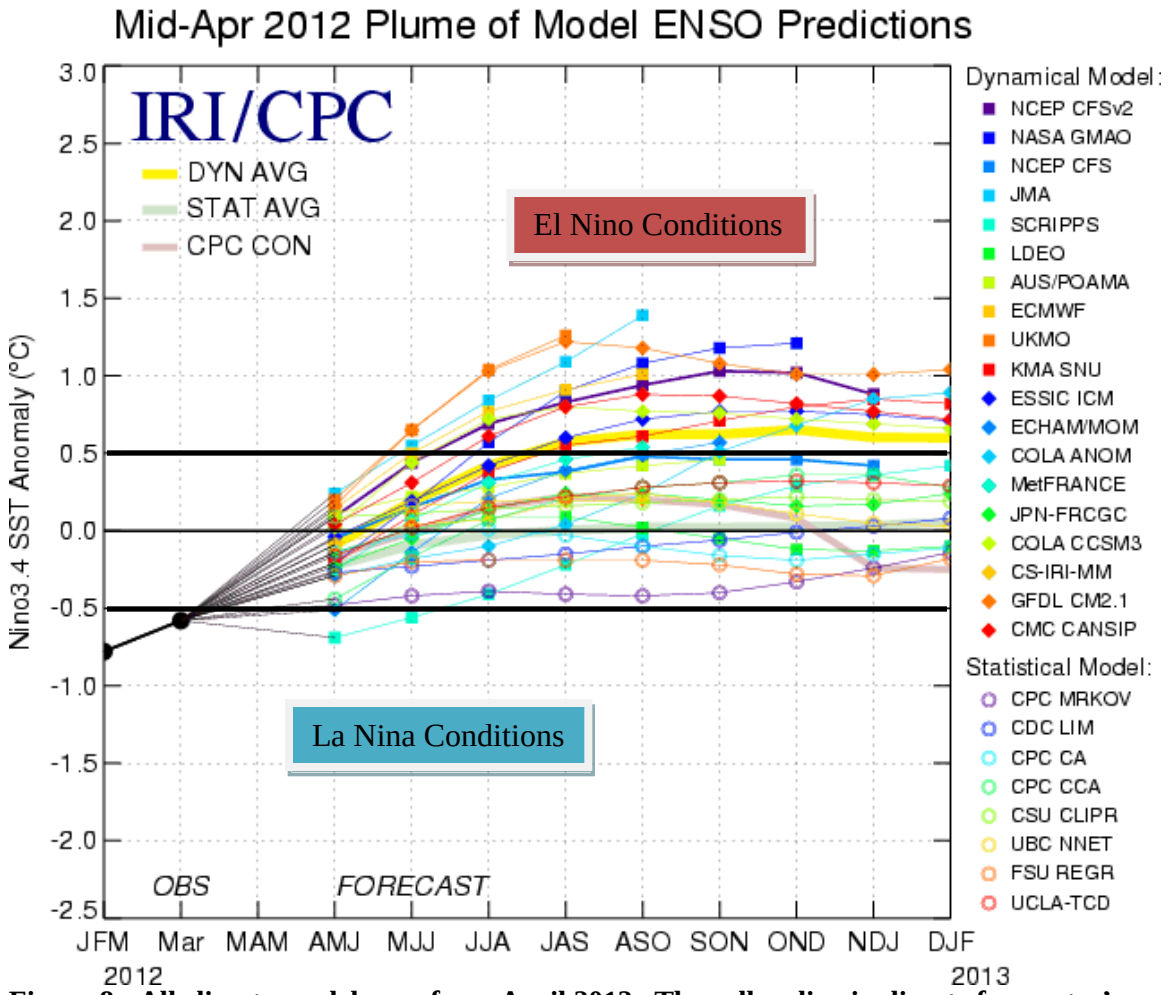


Figure 8 - All climate model runs from April 2012. The yellow line is climate forecaster's preferred dynamical model average indicating a return to ENSO-Neutral conditions this spring and a possible El Nino event developing in the fall months.

2012 Hurricane Season

In December 2011, Drs. Philip Klotzbach and William Gray prepared a qualitative forecast for the upcoming Hurricane Season. This forecast predicted 14 tropical storms, 7 hurricanes, and 3 major hurricanes with a 49% chance of landfall along the U.S. East Coast, including Florida. This prediction was based upon the fact that we continue in the warm phase of the AMO and are coming out of a La Nina winter.

On April 4, 2012, Dr. Kotzbach and Dr. Gray prepared a quantitative forecast for this upcoming hurricane season. From December to April, the Atlantic Ocean underwent an extended period of cooling. This cooling along with a high chance of an El Nino developing this fall has influenced their hurricane prediction. They have lowered the chances of a hurricane strike and have decreased the number of hurricanes expected this year to 10 tropical storms, 4 hurricanes, 2 major hurricanes, and a 24% chance of a hurricane landfall.

Central & South Florida Temperature Outlook:
(Uncertainty exists beyond the summer months due to mixed climate model predictions of an El Nino development).
May – Average
June – Warmer than Average
July thru September –Much warmer than Average
October – Warmer than Average
November thru March 2013 - Average

Central & South Florida Rainfall Outlook:
(Uncertainty exists beyond the summer months due to mixed climate model predictions of an El Nino development).
May thru July – Average
August thru October – Wetter than Average
November thru March 2013 - Average

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