NOAA, NATIONAL WEATHER SERVICE, WEATHER FORECAST OFFICE

Miami, Florida 33165

Beginning of the South Florida Dry Season

2010 Rainy Season Summary

October 8, 2010: The 2010 rainy season ended early as dry and cooler continental air moved over South Florida in the wake of TD 16/Tropical Storm Nicole last weekend. The persistence of this dry and cooler air signals the beginning of the South Florida dry season which officially began on October 4th. This is 13 days earlier than the median start date of October 17th, and is the earliest start to the dry season since 1997. No doubt the early arrival of this more comfortable air is welcome by most people after the record-breaking summer heat observed across South Florida.

The onset of the dry season means that the near-daily rainfall patterns which are characteristic of the summer months have come to an end, with most of the rainfall during these drier months typically coming by way of frontal systems which affect the area on a fairly regular basis between now and April. It is normal to have a transition period of one or two weeks at the beginning of the dry season when weather patterns can fluctuate between cooler and drier conditions and more humid and summerlike conditions. Nevertheless, this variability in temperature and moisture is a sign that the near-daily pattern of summer thunderstorms has stopped. The average rainfall during the dry season ranges from 12 to 15 inches over interior and western sections of south Florida to 15 to 21 inches over southeast Florida.

The 2010 rainy season lasted a total of 141 days, less than the long-term average of 153 days. Rainfall amounts averaged around 40 inches over the eastern metro areas (very close to normal) to around 31 inches over the interior and western parts of South Florida (slightly below the normal of 35 inches). The wet season weather pattern was dominated by high pressure in the middle and upper levels of the atmosphere over the southeast United States, which generally led to greater atmospheric stability, less cloud cover and widely-varying rainfall amounts. This dominant high pressure pattern meant a lack of large-scale weather disturbances across south Florida this summer. This was a major contributing factor to the large variation in rainfall, as there were very few days in which the entire area received a general soaking. Some examples of the large differences in rainfall amounts occurred in Palm Beach County, where Palm Beach International Airport received 24.73 inches of rain, while only a few miles north in

Palm Beach Gardens, a full 20 inches more of precipitation fell (44.73). Naples Municipal Airport recorded just over 32 inches of rain, while a few miles east in Golden Gate, over 39 inches fell. The lowest observed wet season rainfall occurred at Palm Beach International Airport (24.73 inches) and the highest rainfall amount was measured in Hollywood Waste Water Plant (49.37 inches).

The drier than normal conditions over Lake Okeechobee, as well as dry conditions north of the Lake, led to Lake Okeechobee levels which actually fell from a peak of near 15 feet in early May to around 14 feet by the beginning of October (Figure 1).

Here are rainfall amounts and departures from normal (in inches) for a few south Florida locations for the 2010 Wet Season from May 16 to October 3:

Location	**Wet Season 2010 Rainfall**	**Departure From Normal**
Miami Int'l	43.30	8.39
Fort Lauderdale Int'l	38.50	2.64
Palm Beach Int'l	24.73	-7.00
Naples Regional	32.27	-2.79
Miami Beach	43.97	18.84
Moore Haven	29.98	0.91

Here are other wet season rainfall amounts from several NWS cooperative sites:

Miami-Dade County	**Wet Season 2010 Rainfall**
NWS Miami – Sweetwater	46.74
Homestead General Airport	42.81
North Miami Beach	40.36
The Redland	40.16
Broward County	
Hollywood	49.37
Fort Lauderdale Beach	36.05
Palm Beach County	
Palm Beach Gardens	44.73
Juno Beach	43.06
Hendry County	
LaBelle	27.98
Glades County	
Ortona	31.77
Brighton Reservation	30.74
Collier County	
Golden Gate	39.41
Marco Island	28.61

The outlook for the dry season, including potential impacts from the current and forecast La Nina pattern, will be released in a press conference on October 19th. For more information on the dry season

outlook, as well as the latest weather conditions, forecasts, warnings, advisories and statements, please visit the National Weather Service Miami-South Florida Forecast Office's web site at weather.gov/southflorida.

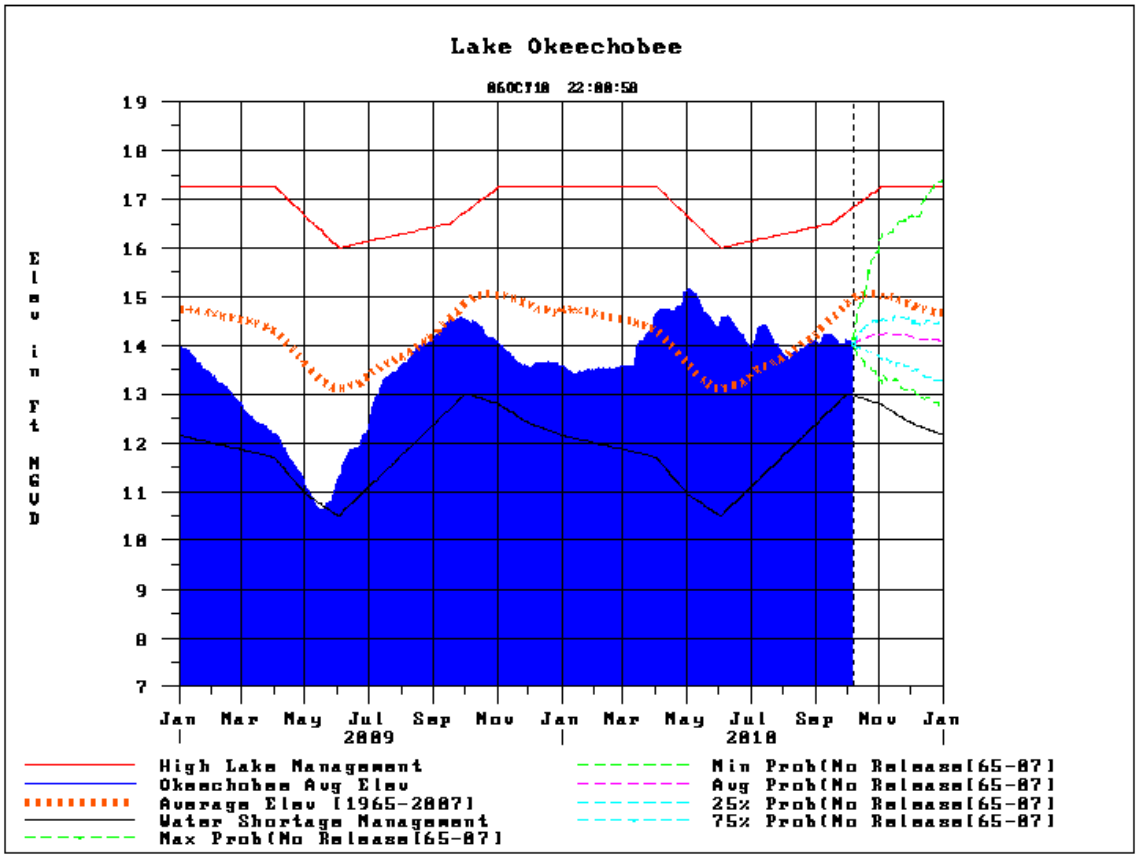

Figure 1: Lake Okeechobee Level Jan 2009 – Oct 2010