MIAMI-SOUTH FLORIDA
National Weather Service
Forecast Office
http://www.weather.gov/miami

EARLY START TO THE 2012 RAINY SEASON

The daily cycle of showers and thunderstorms which defines the South Florida rainy season has begun earlier than normal this year. This year's rainy season started on Tuesday, May 8th which is almost two weeks earlier than the median start date of May 20th and the earliest start since 2003. The rainy season start date is determined as the date when showers and thunderstorms increase in coverage and intensity over much of the south Florida peninsula and continue to develop on a daily basis thereafter, only interrupted by short episodes of dry weather lasting no more than a few days. An increase in atmospheric moisture and instability is the main cause of the daily showers and thunderstorms. This year's rainy season start was aided by a trough in the mid to upper levels of the atmosphere which added to the instability in the atmosphere during the past week.

Despite the early start to this year's rainy season, not all areas have received equal amounts of rain. While portions of the interior and east coast have received heavy rainfall during the past week, areas near the Gulf coast have seen less rain. This is due to the prevailing wind flow which has been out of the west and focused most of the showers and thunderstorms well inland of the Gulf coast. Nevertheless, a shift to more easterly winds along with the already-present moisture and instability would bring increased rainfall to these areas.

SUMMARY OF 2011-2012 DRY SEASON

The 2011-2012 dry season began on October 20th, 2011 and ended on May 7th, 2012, lasting about two weeks shorter than normal. Rainfall for this period was mostly below normal, except for a few areas of above normal rainfall over east coast metro areas. It should be noted that the dry season period included the heavy rain episode of October 28-31, 2011 when copious amounts of rain fell over a large part of the area.

- **Miami** received 22.95 inches of rain between October 20, 2011 and May 7, 2012. This is 3.89 inches above normal for the period.

- **West Palm Beach** received 20.94 inches of rain between October 20, 2011 and May 7, 2012. This is 4.46 inches below normal for the period.

- **Fort Lauderdale** received 18.30 inches of rain between October 20, 2011 and May 7, 2012. This is 4.02 inches below normal for the period.

- **Naples** received 13.72 inches of rain between October 20, 2011 and May 7, 2012. This is 0.70 inches below normal for the period.

Below are rainfall totals at select sites across South Florida for the 2011-2012 dry season. Rainfall values are listed in inches.

DRY SEASON 2011-2012 RAINFALL TOTALS/DEPARTURE FROM NORMAL IN INCHES

Station – ***Beginning of Records***	**Oct 2010-May 2011**	**Dep. fm Normal**
FORT LAUDERDALE – *1912*	18.30	-4.02
MIAMI – *1895*	22.95	+3.89
NAPLES – *1942*	13.72	-0.70
WEST PALM BEACH – *1888*	20.94	-4.46
MIAMI BEACH - *1927*	30.79	+12.52
MOORE HAVEN - *1918*	14.44	-0.40
LABELLE - *1929*	10.69	-5.43

NORMAL VALUES ARE THE 1981-2010 CLIMATIC AVERAGES, BUT ARE NOT AVAILABLE FOR ALL OBSERVING LOCATIONS.

Drier than normal conditions in most of Palm Beach County, Lake Okeechobee area and interior sections of Collier County transitioned to near to above normal rainfall over parts of Broward and Miami-Dade counties (Figure 1).

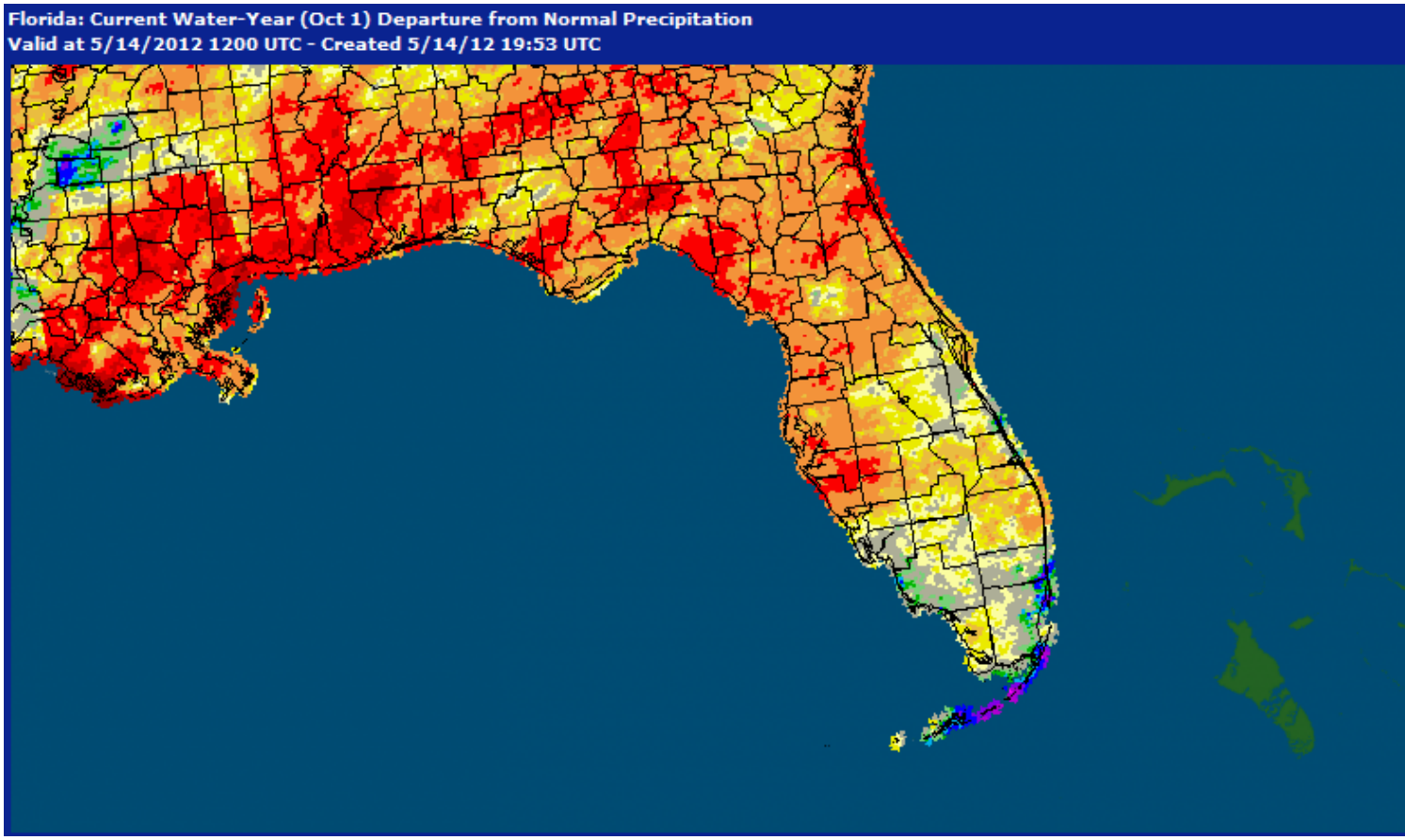

FIGURE 1: DEPARTURE FROM NORMAL RAINFALL SINCE OCTOBER 1, 2011. YELLOW AND ORANGE COLOSR DEPICT AREAS OF BELOW NORMAL RAINFALL, GRAY AREAS ARE NEAR NORMAL AND GREEEN/BLUE AREAS ARE ABOVE NORMAL.

DROUGHT IMPACTS

The wet start to the dry season in late October 2011 combined with a wetter and earlier than normal end in April and early May significantly improved drought conditions over a large part of South Florida. The entire east coast metro area was out of drought conditions; however inland areas around Lake Okeechobee and the Gulf coast were still in moderate to severe drought conditions at the start of the rainy season (Figure 2). The Keetch-Byram Drought Index (KBDI) remains high over the interior and Gulf coast and lower over east coast metro areas. High values of the KBDI are indicative of dry soil conditions which could lead to wildfires.

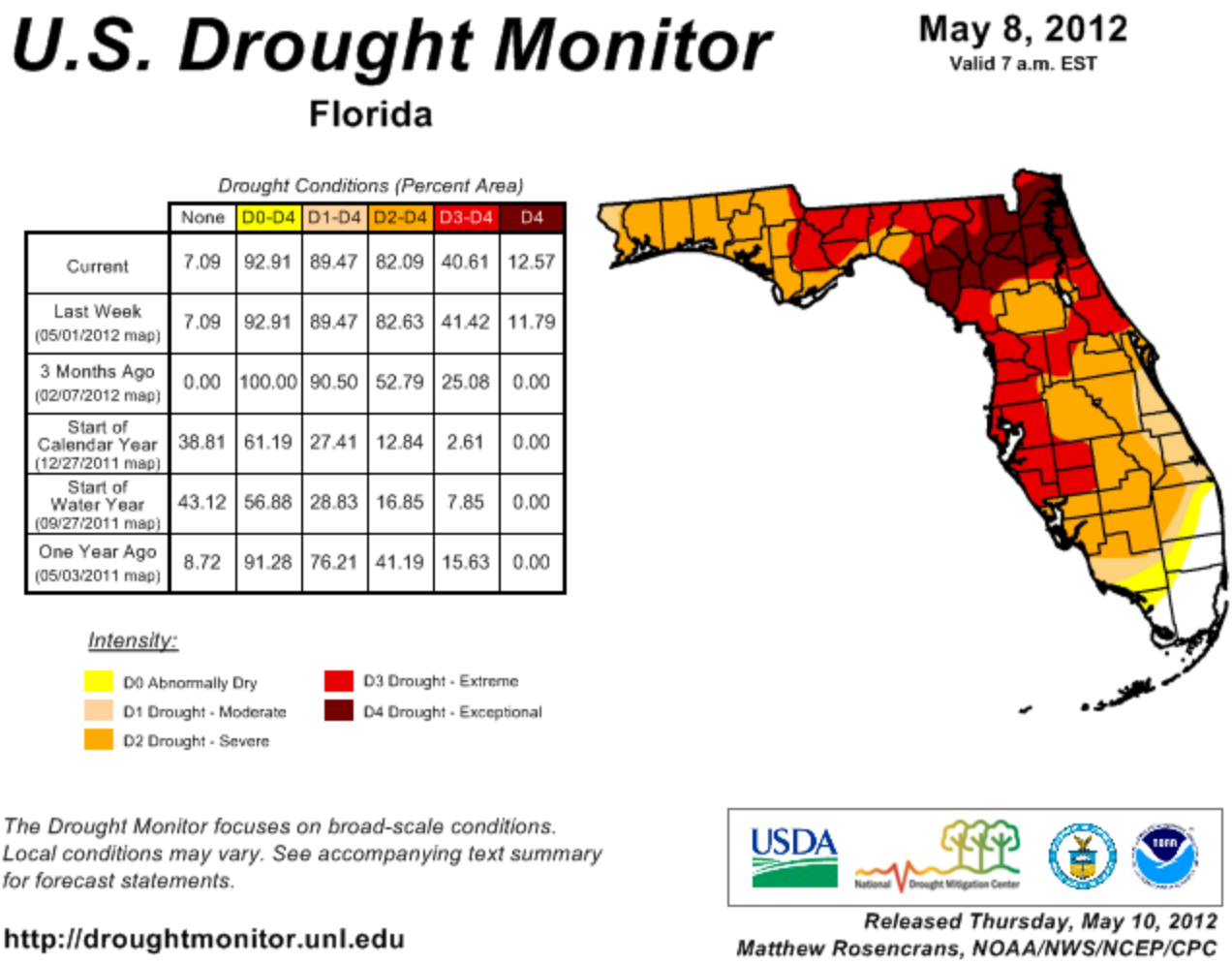

FIGURE 2: DROUGHT MONITOR AS OF MAY 8.

OUTLOOK

The precipitation outlook for the second half of May is for a likely continuation of wetter-than-normal conditions. Thereafter, near normal rainfall is the most likely scenario for the remainder of the wet season which lasts into October, although it must be noted that rainy season outlooks have decreasing levels of confidence as you get farther out in time.

It will likely take a few weeks of persistent, daily rainfall to improve drought conditions over the interior and western sections of southern Florida. Therefore, drought conditions and increased fire danger are likely to linger for most of May and possibly into As a result, heeding the advice of water conservation officials is strongly recommended, as well as burn bans issued by forestry officials due to the dry ground conditions.

Another yearly summer threat in South Florida is rip currents. Rip currents are the leading weather-related hazard in South Florida. Monitor the latest wind and wave conditions, swim at guarded beaches and heed the advice of lifeguards.

Last, but certainly not least, is the ever-present summer threat of lightning. May through July are the most active lightning months in South Florida. To stay safe from lightning this summer, remember this simple rule: When Lightning Roars, Go Indoors! These storms can sometimes contain strong, gusty winds and hail.

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