



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

NEWS RELEASE

July 29, 2011

CONTACTS:

Gabe Margasak

South Florida Water Management District

Office: (561) 682-2800 or Cellular: (561) 670-1245

Randy Smith

South Florida Water Management District

Office: (561) 682-2800 or Cellular: (561) 389-3386

www.sfwmd.gov/news

follow us on 

Groundwater Conditions Improve; Some Areas Still Catching Up *Rainfall is recharging aquifers, but some areas are slow to recover from drought*



(Click on the picture for a larger version.)

West Palm Beach, FL — Wet season rainfall across the 16-county South Florida Water Management District (SFWMD) has raised groundwater levels in many areas while others have been slow to recover from months of record drought.

“We are seeing some wells recovering from months of water shortage conditions, but others have not. We need significantly more rainfall to recharge our aquifers,” said Pete Kwiatkowski, Incident Commander for the SFWMD Water Shortage Team. “How much rainfall is difficult to quantify because of the complex interaction between rainfall, stormwater runoff and groundwater levels in aquifers.”

As July ends, rainfall will be about average for the month, with 6.9 inches District-wide through today. Lake Kissimmee, the Caloosahatchee region and the Big Cypress Basin

saw the largest rainfall totals during the month. Eastern Palm Beach, Broward and Miami-Dade counties received about average rainfall for the month, while Martin and St. Lucie counties received about 86 percent of average.

Following months of drought conditions, the District works to retain as much water as possible in the regional system. However, storage is limited in a system designed primarily for flood control. The District continues to coordinate with cities and counties to help them pull as much water into their local systems as possible during heavy rain events. Releasing water to tide remains a necessary and a normal part of critical flood control efforts.

Surface Water Levels

Recent rainfall has raised water levels in some of South Florida’s key locations close to where they should be this time of year. The Water Conservation Areas are nearing or at their regulation schedules. The schedules, which prescribe water levels based on conditions and the time of year, are tools used by water managers to balance water supply, flood protection and environmental needs.

LOCATION	TODAY’S WATER LEVEL	HISTORIC AVERAGE
Lake Okeechobee	10.30 feet	13.73 feet
WCA-1	15.27 feet	15.44 feet
WCA-2	12.69 feet	12.51 feet
WCA-3	9.05 feet	9.87 feet
Lake Kissimmee	49.66 feet	50.11 feet

Concern remains regarding the low level of Lake Okeechobee. The 730-square-mile lake is still more than 3 feet below its historic average for this time of year. There is a good chance the lake, which supplies water to the City of West Palm Beach and surrounding areas, will remain in its water shortage management zone going into the next dry season unless above-average rainfall conditions occur.

Groundwater Levels

The lake is also a useful example of the relationship between rainfall, stormwater runoff and groundwater levels in aquifers. While an inch of rain directly over the lake will raise the lake an inch, the same is not the case when it comes to groundwater.

The location, intensity and duration of rainfall, along with a host of related factors, determine how groundwater levels respond to a storm. Heavy rain onto paved, developed areas is sent to the coast to prevent localized flooding – even in a water shortage. In contrast, rain falling over natural areas such as the Water Conservation Areas seeps directly into the ground, recharging aquifers tapped by wells for urban and agricultural supplies.

All of these factors play a role in the response of aquifers to rainfall. In Florida, most of the fresh water used by people comes from underground aquifers. Aquifers are composed of multiple layers of porous rock, such as limestone or sandstone, that hold water. Cities and towns, businesses and agriculture draw much of their water supplies

from these aquifers. Supplying approximately 90 percent of the state's drinking water, Florida's aquifers supply the state with more than 8 billion gallons of water each day, making them among the most productive in the world.

The Biscayne Aquifer is the primary source of fresh water for South Florida's Lower East Coast region. Deeper down is the Floridan Aquifer, separated by a confining layer of dense rock. The Floridan Aquifer spans the state and is usually too salty to drink without further treatment in South Florida.

To learn more about Florida's aquifers, click [here](#).

Water Shortage Orders:

- [Two-Day Landscape Irrigation and Golf Course Order](#)
- [Broward and Palm Beach Order](#)
- [Bypass Structure Order](#)
- [South Dade Order](#)



More information is available at:

- [SFWMD Weather/Rainfall Data](#)
- [National Weather Service Dry Season Forecast](#)
- [Climate Prediction Center Precipitation Forecast](#)

#

About the South Florida Water Management District

The South Florida Water Management District is a regional, governmental agency that oversees the water resources in the southern half of the state – 16 counties from Orlando to the Keys. It is the oldest and largest of the state's five water management districts. The agency mission is to manage and protect water resources of the region by balancing and improving water quality, flood control, natural systems and water supply. A key initiative is cleanup and restoration of the Everglades.