Tropical Storm Isaac
Frequently Asked Questions
UPDATED August 29, 2012

The South Florida Water Management District continues to take emergency actions to help reduce flooding from Tropical Storm Isaac and is operating the regional flood control system at full capacity.

Some areas of South Florida along the east coast and around Lake Okeechobee have received more than a foot of rain between the height of the storm on Sunday night and a trailing storm feeder band on Monday afternoon. As a result, some communities continue to experience localized flooding and high water in lakes, swales and on roadways.

Why is my street flooded?
After heavy rainfall events such as this, water in streets, swales, yards and low-lying areas is expected and normal. These areas store and convey water to function as critical components of neighborhood drainage facilities, helping to keep water away from homes and businesses.

Who is responsible for drainage in my area?
Flood control is achieved through an interconnected drainage system. Neighborhood ditches and swales carry excess stormwater to secondary canals. Secondary canals operated by local water control districts, cities, or counties connect and carry excess water to the primary canal system. Primary canals are operated by the South Florida Water Management District. Even with well-engineered systems, flooding may still occur during and after extreme rain events such as Tropical Storm Isaac.

Who do I call to report flooding?
Because standing water in streets, yards and even driveways is expected and normal, it is not necessary for individuals to call and report these types of conditions. This is part of the drainage system design and helps prevent water from entering homes.

However, to report excessive flooding or damaged or blocked water control structures, call your local drainage district or the SFWMD **Citizen Information Line** toll-free at (877) 429-1294.

What is the District doing to relieve flooding issues?
The District is operating the primary system at capacity levels and coordinating with local drainage districts in the hardest hit communities, including Palm Beach, Broward, Miami-Dade and counties around Lake Okeechobee to help alleviate conditions. In addition to ongoing operational efforts, the District has taken emergency action to help reduce flooding from Tropical Storm Isaac in western Palm Beach County, utilized an

emergency detention basin in Miami-Dade County and dispatched divers to remove canal debris in Homestead.

Why is the water not draining faster?
Several areas of the District received unprecedented amounts of rainfall over a short period of time, on top of wet season rains that preceded this event. The intense rainfall from Tropical Storm Isaac overwhelmed local drainage systems in some communities and the District is operating the regional flood control system at full capacity. Drainage into the District's larger, regional canals is taking place, even if it is not visible. Local drainage districts are coordinating with our emergency operations crews to maximize flows as much as safely possible. Following heavy rains, water may take longer to subside as the ground is fully saturated. Water levels will recede over several days as stormwater drainage systems recover.

When will flooded communities see some relief?
Flood waters are receding throughout the day today and throughout the coming week. Although some additional rain is forecast, this is not expected to hamper or reverse drainage operations. Depending on location, standing water may take some time to recede.

What could have been done to prevent this flooding? Why didn't water managers lower the canals prior to the storm to help prevent flooding?
Water managers began taking every action possible, within the capabilities of the regional flood control system, before, during and after Tropical Storm Isaac to manage the intense rainfall and stormwater runoff. Before the storm, water levels in canals were lowered to pre-storm ranges, field crews conducted inspections and ensured adequate fuel supplies for pump stations and other equipment. During the storm, control gates on structures were opened to maximize flows in the regional canals. Water managers also worked with local drainage districts to help maximize flows from neighborhood systems into the District's primary canals.

Even with these standard and emergency actions, complete flood-proofing is not possible in South Florida given the potential for excessive rainfall from storm events.

Why did conditions progressively get worse on Monday afternoon?
Existing levels in surface water and groundwater affect the ability of drainage systems to receive or store new rainfall. Certain areas of the District received an unprecedented amount of rainfall in a short period of time – including up to 6 additional inches on Monday. If the underground water table is already high, water cannot soak into the saturated ground. Water levels should recede over the next several days as stormwater drainage systems recover.

Why haven't flood waters receded in the western C-51 basin in Palm Beach County, which includes The Acreage, Loxahatchee Groves and Deer Run areas?
Several areas in Palm Beach County were heavily impacted due to historic rainfall amounts. In coordination with the Indian Trail Improvement District (561-793-0874), increased discharges are being made to the C-51 Canal. By tonight, temporary pumps at two separate locations adjacent to the J.W. Corbett Wildlife Management Area will be operating to divert water to the C-18 and L-8 canals. This will further improve drainage from affected communities in Palm Beach County by moving water into Lake Okeechobee and to tide. In addition, another temporary pump is set to be installed August 30 near the L-8 Reservoir in the Deer Run area.

Why is the C-51 canal still high?
The C-51 basin received a historic amount of rainfall over a short period of time. Preliminary estimates indicate that the C-51 Basin, which encompasses central Palm Beach County, experienced a 1-in-100-year rainfall event from Tropical Storm Isaac. Based on radar rainfall estimates, up to 14.85 inches of rain fell in the C-51 Basin for the period from August 25 at 7:30 a.m. to August 28 at 7:30 a.m. This is in addition to the rainfall received before the onset of the storm that brought the estimated seven-day total for the basin to 17 inches.

Water levels are beginning to gradually decline in the C-51 Canal, which moves water to tide from inland areas of Palm Beach County. Since Monday, water managers have been maximizing discharge from both the east and west ends of the C-51. The District was able to accept some additional flows into the C-51 Canal from the Indian Trail Improvement District, which manages the secondary canal system in the Acreage. Water managers must carefully balance the timing and location of inflows from secondary systems into the canal to prevent flooding in other communities downstream.

What else is the District doing to reduce flood waters?
The District is utilizing excess capacity in the L-8 Reservoir and coordinating with the U.S. Army Corps of Engineers to move water into Lake Okeechobee. As additional capacity becomes available in the C-51 Canal, the District is moving water there from the L-8. Emergency orders have been issued and remain in place to maximize system operations and divert water to help alleviate local flooding in other areas.

In the eastern C-51 basin, a temporary pump is being installed August 30 on the south side of the C-51 Canal near the Palm Beach Plantation development to help move floodwaters.

In the northern part of the system, water is being moved into Lake Okeechobee at a rate in excess of 30,000 cubic feet of water per second — the equivalent of filling up an

Olympic-sized swimming pool every two seconds. The lake level has increased from 12.48 feet NGVD on Monday to 13.39 feet NGVD today and is continuing to rise.

What can I do in the future to help improve drainage?
To ensure peak performance of local drainage systems, property managers and residents should conduct the following inspections and maintenance:

- Grates, pipe openings and connections to culverts should be clear.
- Swales and grassy water storage areas should be within proper specifications for height, length and depth and be free of exotic plants.
- Ditches and canals should have all trash, sediment and dead vegetation removed so flow of water is not obstructed.