Tropical Storm Isaac
Frequently Asked Questions
UPDATED August 31, 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 in the most heavily impacted areas. Emergency orders have been issued and remain in place to maximize system operations and divert water to help alleviate local flooding.

Some areas of South Florida along the east coast and around Lake Okeechobee 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.

IMPORTANT: Questions or concerns regarding health-related issues, including septic tanks and well sanitation and testing, should be directed to your local county health department. In Palm Beach County, the number is (561) 840-4500.

FACTS FOR WESTERN C-51 BASIN COMMUNITIES IN PALM BEACH COUNTY
(Also see maps on pages 6 and 7)

Is there a breach in the Corbett Wildlife Management Area levee?
No. There is no breach in the levee on the southern end of the Florida Fish & Wildlife Conservation Commission's (FWC) Corbett Wildlife Management Area. Rumors that a breach has occurred or is eminent are simply not true. Following the large amount of rainfall from Tropical Storm Isaac that raised water levels in the area, the District surveyed flooding issues in The Acreage. To assist our partners, we also performed inspections on the Corbett levee. These inspections confirm that the structural integrity of the levee has not been compromised.

The District has installed large temporary pumps on the east and west sides of Corbett to address flooding in The Acreage and also to help equalize water levels in the Wildlife Management Area. This is being accomplished by pumping water into the L-8 and C-18 canals. In addition, the FWC has been degrading roads within Corbett to help convey overland flow in the area toward our temporary pumps. Efforts to lower water levels using the temporary pumps are expected to be achieved without incident.

If any areas of concern are found, the District has prepared by stockpiling dirt and rocks adjacent to the Corbett property. This is a proactive measure widely used by operators of levees and dams nationwide.

As residents have observed, stormwater runoff from Corbett is making its way across the road that borders the Wildlife Management Area on the east. This is not a breach. The water makes its way east to the Mecca Farms property where a series of former citrus canals and structures direct it north to the C-18 canal and away from The Acreage. The water flowing over the road is not considered a problem but just another avenue to lower the water levels in the Wildlife Management Area.

Are flood waters receding in such areas as The Acreage, Loxahatchee Groves and Deer Run?
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 to help drain flood waters. Six temporary pumps installed by the District at two separate locations adjacent to the J.W. Corbett Wildlife Management Area are operating to divert water into the C-18 and L-8 canals. This is improving drainage from affected communities in Palm Beach County by moving water into Lake Okeechobee and to tide.

In coordination with the City of West Palm Beach, the Indian Trail Improvement District also installed a temporary pump to divert flood water into the city's M canal and then into the Grassy Waters Preserve.

Two temporary pumps have been installed by the District in the Deer Run community to assist this community in moving flood waters into the L-8 canal for discharge to Lake Okeechobee. Deer Run is not a part of the District's primary system and is not served by a local drainage district. The community is also operating a temporary pump.

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. As capacity has become available in the C-51, additional inflows have been ramped up from The Acreage. About 1,000 cubic feet per second is now discharging from the Indian Trail Improvement District to the C-51 – four times the permitted non-emergency outfall rate. The District is closely coordinating with local drainage districts and municipalities to accept additional flows into our regional canals from the secondary drainage systems, which are still experiencing flooding conditions.

What other actions are being taken to reduce flood waters in the C-51 basin?
The District is also using the L-8 canal to divert flood waters. Some water is moving north into Lake Okeechobee, which is currently at a lower level than the canal level. Using excess capacity in the L-8 reservoir, water is also moving from the L-8 canal into the reservoir via fully opened existing culvert connections. More than 2,400 acre-feet of water has been diverted to the reservoir so far. As additional capacity becomes available in the C-51 Canal, the District is moving water from the L-8 canal south into the C-51 – the major conduit for moving water to tide from inland areas of Palm Beach County.

In the eastern C-51 basin, the Palm Beach Plantation residential development contracted with a private business to install six temporary pumps to help move neighborhood floodwaters. Water levels have dropped three feet since installation of the pumps.

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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. For health-related concerns, contact your county health department.

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 taking so long to drain?
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 should continue receding throughout the week. Even with typically forecasted summertime rains, it is not expected to hamper or reverse drainage operations. However, depending on location, or any additional heavy rains, standing water may take longer to recede.

What actions did the District take prior to the storm to 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.

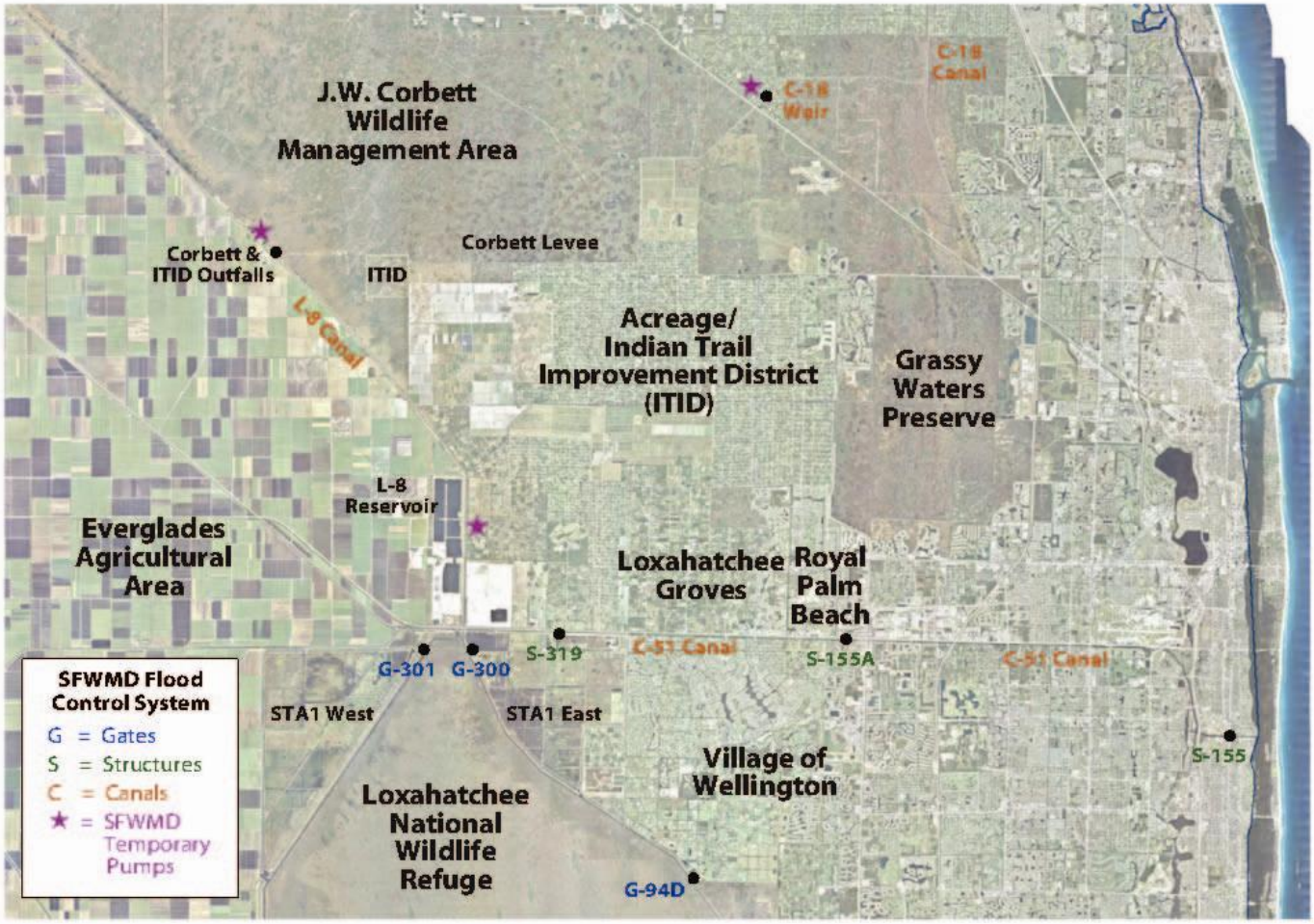
Why did conditions progressively get worse on Monday afternoon?
Existing levels in surface water and groundwater affect the ability of drainage systems to receive or store new rainfall. Certain areas of the District received an unprecedented amount of rainfall in a short period of time – including up 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.

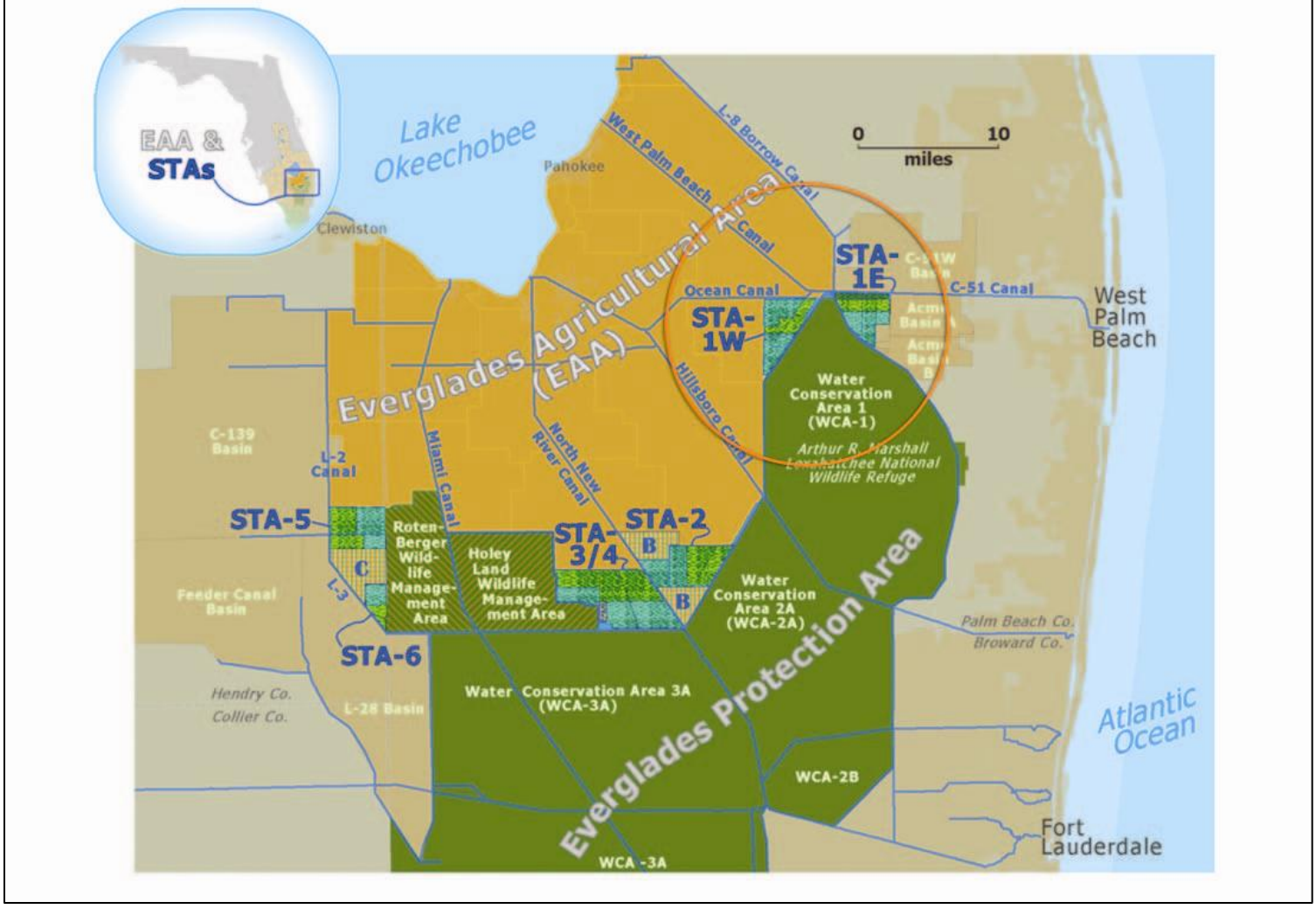
What can I do in the future to help improve drainage?

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.

SOUTH FLORIDA WATER MANAGEMENT DISTRICT




SOUTH FLORIDA WATER MANAGEMENT DISTRICT
EAA &
STAs
Lake
Okeechobee
Pahokee
Clewiston
L-8 Borrow Canal
West Palm Beach Canal
0
10
miles
STA-
1E
C-51 Canal
West
Palm
Beach
Ocean Canal
STA-
1W
Everglades Agricultural Area
(EAA)
Water
Conservation
Area 1
(WCA-1)
Arthur R. Marshall
Loxahatchee National
Wildlife Refuge
Hillsboro Canal
C-139
Basin
L-2
Canal
Miami Canal
North New
River Canal
STA-5
STA-
3/4
STA-2
Roten-
Berger
Wild-
life
Manage-
ment
Area
Holey
Land
Wildlife
Manage-
ment Area
C
B
B
L-3
Feeder Canal
Basin
Water
Conservation
Area 2A
(WCA-2A)
Palm Beach Co.
Broward Co.
STA-6
Everglades Protection Area
Hendry Co.
Collier Co.
L-28 Basin
Water Conservation Area 3A
(WCA-3A)
Atlantic
Ocean
WCA-2B
Fort
Lauderdale
WCA -3A