

CENTRAL AND SOUTHERN FLORIDA

FLOOD CONTROL DISTRICT NEWS RELEASE

901 EVERNIA STREET
WEST PALM BEACH, FLA.

TOM HUSER, DIRECTOR OF INFORMATION & EDUCATION

AREA CODE 305

655-3411

An FCD FEATURE

July 20, 1970

RELEASE DATE: Immediate

HURRICANE PROTECTION IS A PURPOSE OF FCD WORKS

Dark, low-flying, squally clouds, the harbingers of tropical storms, began to scud in over the south shore of Lake Okeechobee the morning of September 16, 1928, which turned out to be perhaps the darkest day in Florida's history.

The residents of the agricultural communities on the rich mucklands south of the big lake were not unduly alarmed over the weather change at first -- even though they had received vague reports of a hurricane churning up the Atlantic off the southeast coast of Florida.

According to radio and newspaper reports, the hurricane, which had already taken 275 lives in Puerto Rico, was not expected to strike the South Florida mainland.

But as the day wore on the winds increased steadily and rain squalls became more numerous and vicious. That night, Lake Okeechobee, already swollen by heavy August and September rains, broke through the muck levee on the southeast shore of the lake and virtually leveled almost every one of the farm communities.

"It was the last day of life for almost 2,000 people," wrote Lawrence E. Will, an eyewitness to the tragedy, in his book "Okeechobee Hurricane." Will, author and historian now lives in West Palm Beach.

In loss of life, the Lake Okeechobee hurricane ranks as the third worst disaster

in American history. It was surpassed only by the hurricane of 1900, which destroyed the island city of Galveston, Texas, killing between 5,000 and 6,000 people, and the Johnstown, Pa., flood which took a toll of 2,000 to 2,200.

Peak sustained winds in the Lake Okeechobee hurricane were estimated at 160 m.p.h. by a weather observer at Canal Point. Checking the area after the storm, engineers found that the crest of the wave that rolled over and through the levee had been 11.8 feet above the ground in many places.

The hurricane also caused great damage on the coast -- especially in the West Palm Beach area, which was in the path of the killer storm. The Barograph reading in West Palm Beach was 27.43, the lowest barometer reading ever recorded until that time.

After the 1928 storm, a great many residents of the Glades would evacuate to Sebring and other communities north of Lake Okeechobee when a hurricane threatened the area. After the Hoover Dike around the shore of the lake was completed, the great majority of the populace remained in the Glades, confident that the massive dike afforded them adequate protection.

Construction of the Hoover Dike was begun in 1930, and the work was completed in 1937. The dike is 85 miles long and is 34 to 38 feet above sea level. By comparison, the water level schedules for the lake vary from $13\frac{1}{2}$ to $15\frac{1}{2}$ feet above sea level.

Robert P. Blakeley, Chairman of the Governing Board of the Central and Southern Florida Flood Control District, points out that the vast FCD works provide hurricane protection throughout the 18-county district.

The FCD operates a system of 1,400 miles of levees, and there will be more in the future. The FCD project is only about 55 per cent completed. The levees running north-south on the east side of the three FCD Everglades conservation areas are major works in preventing flooding in coastal and suburban areas.

More than 100 major spillways and dams, and 14 large pumping stations afford additional protection in times of hurricane or flood. Most of these pumping stations

are capable of moving over one million gallons of water per minute.

The pumping station west of West Palm Beach at 20-Mile-Bend, the largest low-level pumping station in the world, can pump two and a half million gallons per minute.

Briefly, this is the way the FCD system functions to protect life and property when a storm threatens:

Each year, instructions for emergency operations are issued to FCD personnel from Kissimmee southward to Homestead. When a hurricane alert is announced, all field men know what to do automatically.

Orders are issued from FCD headquarters in West Palm Beach by telephone and a two-way radio communications system. Emergency crews are ready to roll if needed. In addition, the entire FCD system had independent power sources to enable the works to remain in operation in any storm.

The FCD watches each storm closely. There is a teletype weather service tied in with the National Hurricane Center in Miami in addition to telephone contact with the center.

Twenty-four hours before the estimated time of arrival of a storm, FCD personnel go into action. Some spillway gates are opened, some closed.

The levels of canals are drawn down to provide storage space for the torrential rains that usually accompany a hurricane. This is accomplished by opening coastal spillways and discharging to tidewater, and closing the gates on the perimeters of the FCD reservoirs.

Pumping stations take water from the canals and pump it into the three inland conservation areas and Lake Okeechobee. When the storm threat is past, gates on the coast are closed and water is dumped from Lake Okeechobee and the three conservation areas back into the canals to reestablish the water table.

Although the FCD works and strict building codes minimize the danger of a hurricane today, precautions still must be taken by the citizenry to protect life

and property. Any doubt of this was erased by last year's Camille, the super hurricane that wreaked devastation on the upper Gulf Coast.

Will, the author of "Okeechobee Hurricane," who experienced the severe hurricanes of '26, '28, '47 and '49, recently had this to say about precautions in advance of a storm:

"The main things are to arrange to ride out a hurricane in a strong building that is located on ground with an elevation that is above the possible or predicted level of storm tides. And people should have a supply of drinking water and canned food."

These must be considered as "must" requirements, for no one really knows how a coastal area of Florida would fare in the path of a monster hurricane like Camille.

Will said the Hoover Dike provides adequate protection for the residents around the lake. He said this was proven in the 1949 hurricane. The U. S. Army Corps of Engineers said the 1949 hurricane "operated" against the levees for a period three times as long as any previous storm and with "greater intensities."

Will was uncertain, however, as to the possible fate of some low-lying coastal areas if a storm as intense as Camille happened to strike. Fortunately, the odds are heavily against such a possibility. Camille is generally considered to be the "Storm of the Century."

At 26.73 inches, the barometric pressure in the eye of Camille was lower than that of the 1928 hurricane. Camille, with her estimated 175 m.p.h. winds and 25-foot peak storm tide killed 256 persons and was the most expensive storm in history.

Consider these facts and then ask yourself: Aren't they sufficient reasons to be thankful for an FCD system -- even though it is barely more than half completed?