



FEMA



Pump Station Workers Seek Refuge in Hurricane-Resistant Rooms

Palm Beach County, FL – When Hurricane Wilma hit Florida in October 2005, mitigation measures and emergency planning were put to the test at two water control pumping stations located at the edge of the Everglades. Workers inside the stations were safe and the pumps remained in operation during the storm.

Operators at two South Florida Water Management District (SFWMD) stations followed their emergency plan and did not panic. Personnel, who must remain at the stations before, during, and after any hurricane event to ensure continuous operation, retreated to fortified hurricane-resistant rooms during Wilma. When the storm passed, workers returned to their priority assignment – making sure that the pumps were running smoothly to keep residents’ homes dry.

“Because of South Florida’s flat terrain, it is critical to keep [our] 25 major pump stations running during a hurricane event, moving flood waters through miles of canals away from urban and agricultural areas,” explained Olivia McLean, Director of Emergency Management at SFWMD. “If these pump stations were not working during a hurricane or excessive rain event, many areas in South Florida could quickly be under water.”

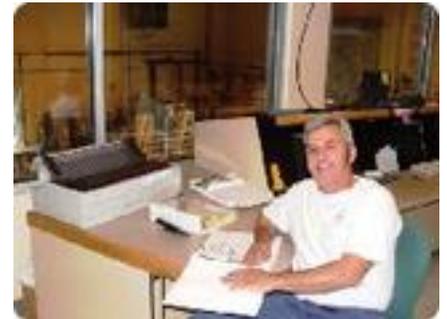
After Hurricane Andrew (1992), SFWMD revised and expanded its emergency management operations to address the safety of its workers, while ensuring the continuous operation of the pumping stations. SFWMD embarked on a program to harden all of its facilities against high wind events. Over several years, roofs were upgraded, and hurricane shutters and heavy steel doors were installed. Worker safety inside the buildings was also addressed.

In the spring of 2000, SFWMD engineers designed and constructed hurricane-resistant rooms inside 11 of the District’s pumping stations. The rooms were constructed with reinforced concrete to resist a Category 5 hurricane. At four other stations, existing rooms, such as kitchens or bathrooms, were retrofitted to meet the same high standard of fortification. Grants totaling \$105,000 from FEMA’s Hazard Mitigation Grant Program (HMGP) funded much of the total cost of \$117,000 to harden the 15 rooms. Following a major disaster declaration, the HMGP funds up to 75 percent of the eligible costs of a project that will reduce or eliminate damages from future natural hazard events. The balance was paid for by SFWMD.

“We were in the control room when the bay door started to go out, but we stayed calm,” said station G-335 Chief Operator Luis Bianchi, recalling his response when Wilma hit. “We just gave a quick check of the gauges and headed to the [fortified] kitchen.” Gary Fisher, Chief Operator at pump station S-5A, noted that “having that [fortified room] takes the fear out of the picture when you’re out here in a storm. If you need it, it’s there.”

Director McLean described the pump station operators as being on the front lines. “We think of them as heroes,” she said. “Storm or not, they have to be there. Having the fortified rooms allows us to have those men where we need them most. But most of all, it allows us to have them safe.”

**Palm Beach County,
Florida**



Quick Facts

Year:

1998

Sector:

Public

Cost:

\$117,856.00 (Actual)

Primary Activity/Project:

Safe Rooms/Community Shelters

Primary Funding:

Hazard Mitigation Grant Program (HMGP)