

HURRICANES, SEVERE STORMS AND MARINA PREPAREDNESS

Neil Frank

I am going to talk to you about two perspectives -- as marina operators and as Florida residents because you should be aware of what problems we, as residents of Florida have.

Most people when they think about a hurricane think about a big wind storm. But the thing we fear most in a hurricane is not so much wind but water. Water comes in two forms in a hurricane -- first heavy rains and inland flooding along the rivers and canals; the second is the storm surge. This is a column of water, not one individual wave -- a column of water that may be fifty miles wide that sweeps across the coastline near the point where the eye of the storm makes landfall. Superimposed above the waves that are normal are higher waves. The eye lands and the waves are dragged around the tree tops. Water is heavy and moving. A storm surge acts like a giant bulldozer.

(Dr. Frank had numerous slides showing examples of hurricane damage and of building construction which was not hurricane resistant.)

We have a people problem. In the sixties we had a 10 percent increase in the number of people who lived in the U.S. But there has been a 43 percent increase in the number of people who live along beachfronts. We have brand new construction from Texas to Maine. Tied in with an increase in population are people coming to Florida today for sunshine, surf, and fishing, so we have marinas and boatyards and a tremendous increase in marine interest which is your primary concern.

We have population concentrations today that I'm not sure we know what to do with. I'm not sure we can evacuate places where we have such large groups of people today.

(Dr. Frank discussed problems in such areas as the Florida Keys, Dade County, and the Tampa Bay-St. Petersburg area.)

To complicate our problems, the greatest increase in our coastal population is now occurring where we're having a recent lull in hurricanes. In the sixties and seventies the hurricanes were in the Gulf of Mexico. In the fifties they were up the east coast. In the forties they were over Florida. In a six-year period, 1944 to 1950, we had seven major hurricanes in the state. In the forties and fifties we did things that we don't do today like trimming our tree limbs back every spring because those big limbs hanging over a house can come down and do tremendous amounts of damage.

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(Dr. Frank showed a
Eloise in Panama City in

of the destruction from hurricane

There was poor planning in the development of the community. The sand dune is nature's way of reviving the beach in times of high winds. The water washes down and flows in and goes down and we have a beach left, and the winds leave we have a sand dune. It's a cyclical process and we have a beach. The dune also provides a measure of protection not absolute, but a measure of protection for those who decide to locate behind it. But one of the first things the builders did there was to bulldoze the sand dunes down so that guests of the hotels could have instant access to the water. There was a lot of controversy in this county (Bay) over establishing setback lines. They're establishing them all around the state now, but the first place was in this county.

(Dr. Frank showed additional slides of hurricane damage in other parts of the U.S. and on the southeast and west coasts of Florida.)

I don't have solutions for all of this, but I think we ought to be aware of the problems. The thing we fear most is that sometime in the near future with the right hurricane in the right location we're going to have a historical death toll. The death toll will be even greater than the Galveston disaster in 1900 where we lost 6,000 lives, and we're going to have historical damage at some marinas that you are associated with. You have literally millions and millions of dollars tied up at those docks, and one hurricane could do multimillion dollars worth of damage in your small area alone.