

Hurricane Hazards

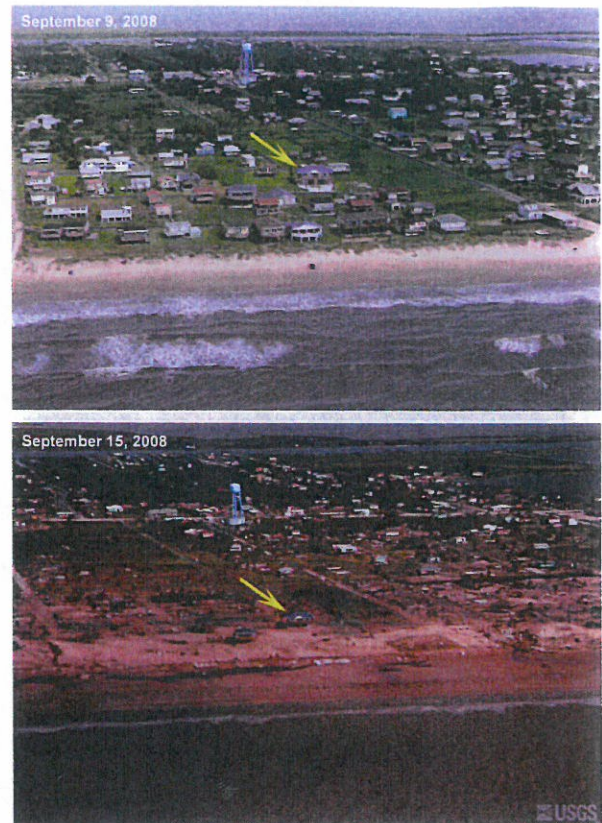
Storm Surge/Tide

Storm surge and large waves produced by hurricanes pose the greatest threat to life and property along the coast.

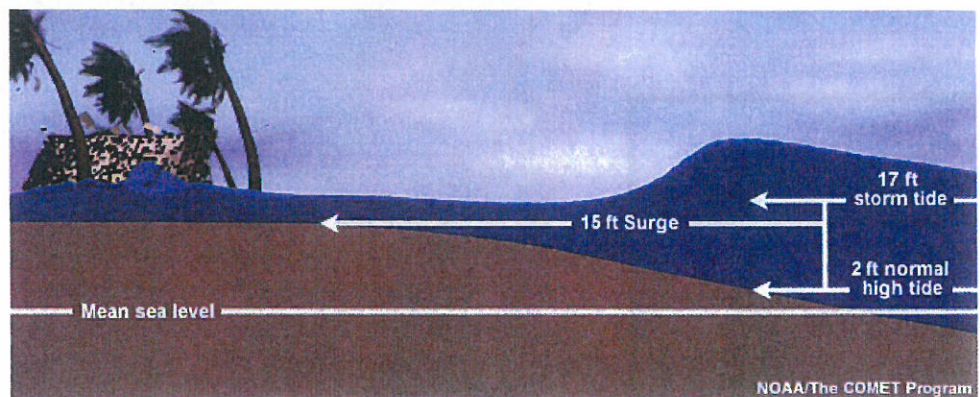
STORM SURGE is an abnormal rise of water generated by a storm's winds. Storm surge can reach heights well over 20 feet and can span hundreds of miles of coastline. In the northern hemisphere, the highest surge values typically occur in the right front quadrant of a hurricane coincident with onshore flow; in the southern hemisphere, the left front quadrant. More intense and larger hurricanes produce higher surge. In addition, shallower offshore waters contribute to higher storm surge inundation. Storm surge is by far the greatest threat to life and property along the immediate coast.

STORM TIDE is the water level rise during a storm due to the combination of storm surge and the astronomical tide. For example, if a hurricane moves ashore at a high tide of 2 feet, a 15 foot surge would be added to the high tide, creating a storm tide of 17 feet. The combination of high winds and storm tide topped with battering waves can be deadly and cause tremendous property damage along an area of coastline hundreds of miles wide.

The destructive power of storm surge and large battering waves can result in loss of life, buildings destroyed, beach and dune erosion and road and bridge damage along the coast. Storm surge can travel several miles inland. In estuaries and bayous, salt water intrusion endangers public health and the environment.

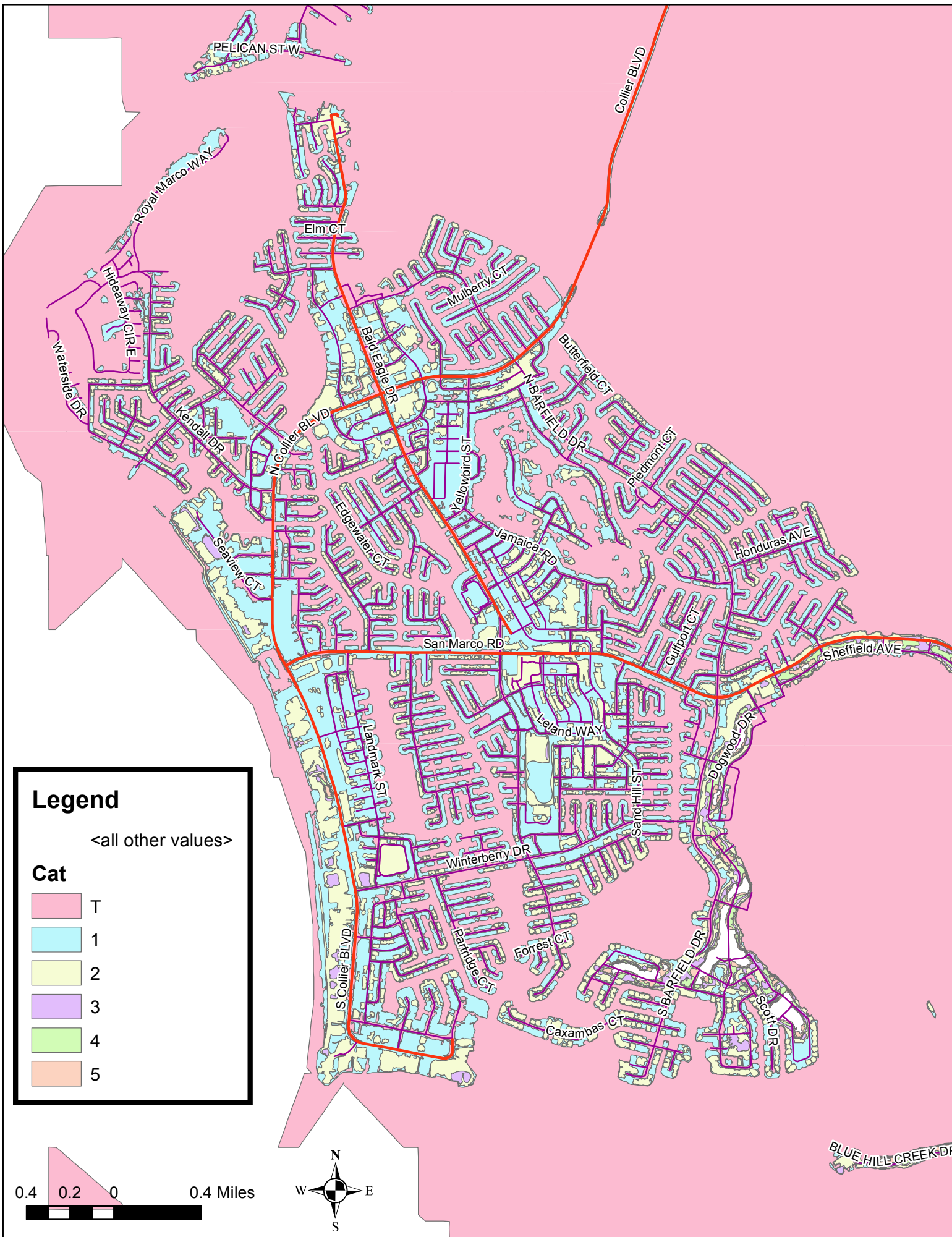


Before and after Hurricane Ike on the Bolivar Peninsula, TX, September 2008/USGS



Historical Storm Tide Events

- **1900:** Galveston, TX, hurricane, resulted in more than 8,000 deaths, most by storm tide.
- **1969:** Hurricane Camille produced a 24-foot storm tide in Mississippi.
- **1989:** Hurricane Hugo generated a 20-foot storm tide in South Carolina.
- **1992:** Hurricane Iniki produced a 6-foot storm tide on the island of Kauai in Hawaii.
- **2005:** Hurricane Katrina generated a 27-foot storm tide in Mississippi.
- **2008:** Hurricane Ike produced a 20-foot storm tide in Texas.

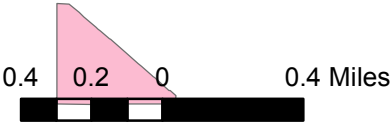


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PELICAN ST-W

Royal Marco WAY

Collier BLVD

Elm CT

Hickory CIR E

Waterside DR

Kendall DR

N Collier BLVD

Bald Eagle DR

Mulberry CT

Butterfield CT

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Piedmont CT

Yellowbird ST

Edgewater CT

Jamaica RD

Honduras AVE

Seaview CT

San Marco RD

Guilford CT

Sheffield AVE

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Dogwood DR

Winterberry DR

Forrest CT

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Scott DR

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