

HURRICANE KATRINA: GIS SPATIAL ANALYSIS OF FLOOD IMPACTS IN MISSISSIPPI

Residential Substantially Damaged Buildings in Relation to the Advisory Base Flood Elevations and Q3

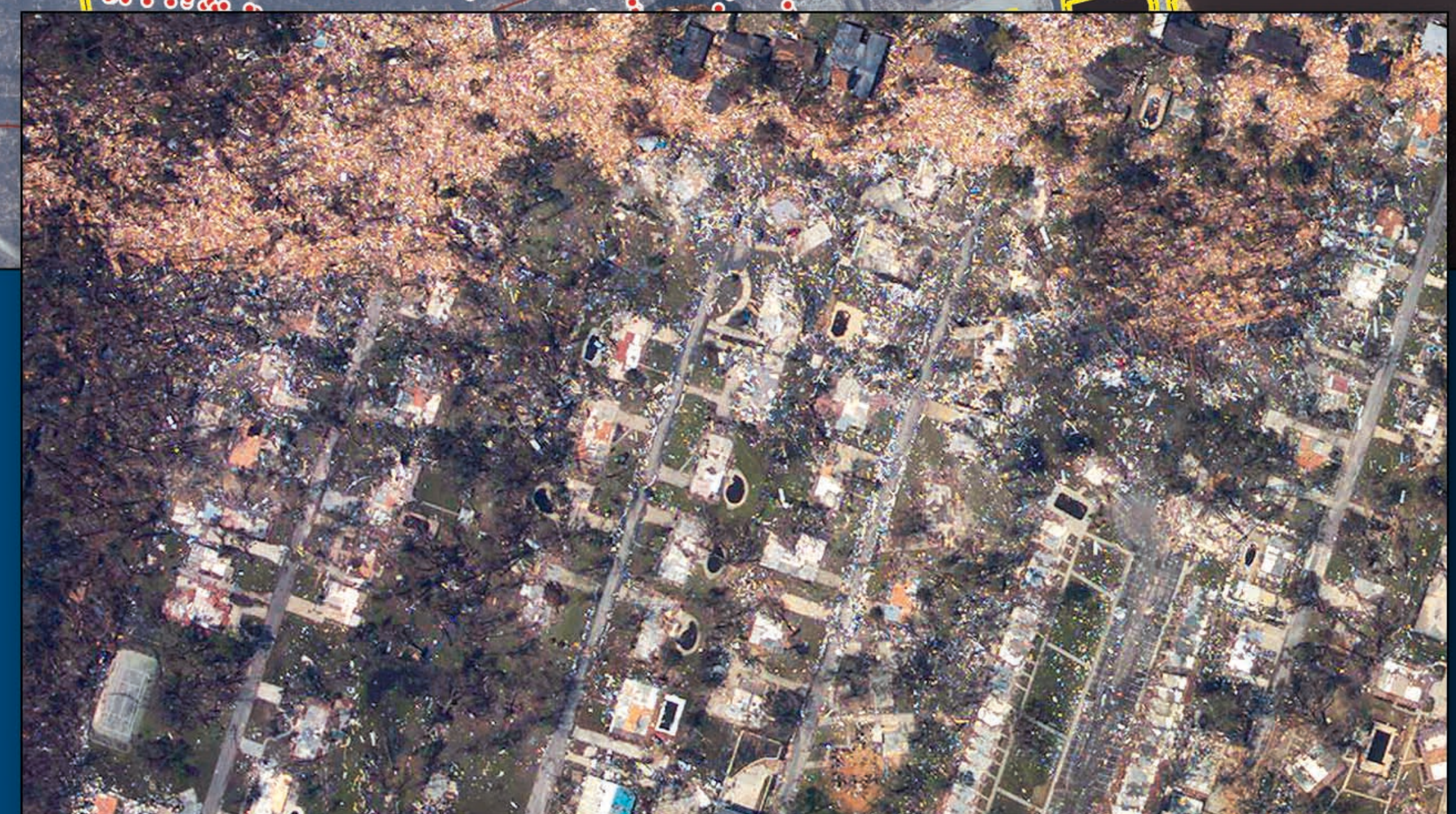
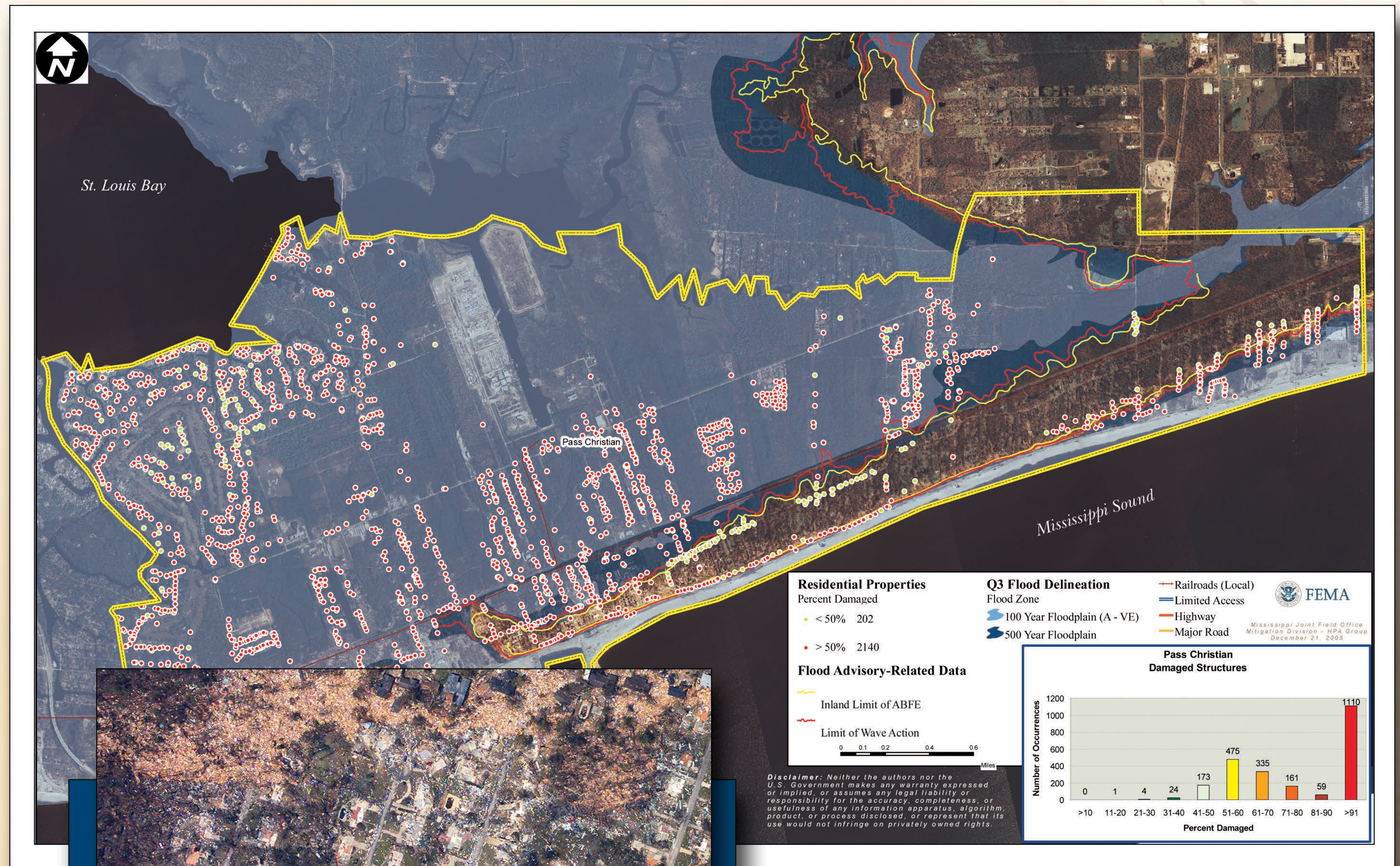
City of Pass Christian, Mississippi.

The City of Pass Christian, located almost totally within a floodplain, was devastated by Hurricane Katrina. This map depicts Q3 data (a digital representation of the current Flood Insurance Rate Map) for substantially damaged residential structures located within the 100- and 500-year floodplain. Of the 2,342 structures that were damaged from the hurricane, 91% received damages with costs well over 50% of their pre-disaster fair market value. Over half of damaged structures were more than 90% damaged.

The severity of damage in Pass Christian is a strong indication that existing flood protection measures were not sufficient to withstand such an intense hazard event. When rebuilding, property owners in Katrina-affected communities that accept FEMA mitigation grant funding must build to meet higher flood protection standards--the Advisory Base Flood Elevation (ABFE) standards. ABFEs reflect an improved understanding of flood risk based on an additional 25 years of storm, flood, and tidal data. This provides communities with a more reliable basis for rebuilding safer and stronger.

For more information about the NFIP and floodplain management:
www.fema.gov/plan/prevent/floodplain/index.shtm

To view an official FIRM for free:
www.msc.fema.gov



The most dangerous and damaging feature of a coastal storm is **storm surge**. Storm surge is water, including waves, pushed onshore by a storm. The more intense the storm, the the greater the height of the water and the greater the damage to the coastline. Storm surges inundate coastal areas, wash out dunes, cause backwater flooding in rivers, and can flood streets and buildings in coastal communities.