

IMPROVING FEMA'S COASTAL FLOODPLAIN MAPPING: PRIMARY FRONTAL DUNE AND COASTAL A ZONE ASSESSMENTS FOR THE NFIP

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A Federal Emergency Management Agency (FEMA) study on the "Impact of Climate Change on the National Flood Insurance Program and Improving Coastal Flood Plain Mapping" was initiated in the fall of 2008. This study will have significant implications for protecting life and property nationwide, and has three objectives:

- (1) The first, and most complex, is to predict the impact of climate change at the national level on the National Flood Insurance Program (NFIP). A detailed description of this objective and results will be presented in a separate abstract.
- (2) The second objective is to evaluate FEMA's Primary Frontal Dune (PFD) regulations and policies. The goal of this study is to evaluate current flood insurance and hazard identification regulations, policies and guidelines which require the PFD be included entirely within the coastal high hazard area (VE Zone).
- (3) The third objective is the investigation of a new coastal flood insurance zone, the Coastal A Zone, to better account for the increased risk to property or loss of life in areas subject to wave hazards below the 3-foot wave height threshold of the VE Zone.

PFD Study

An evaluation is needed to determine the effectiveness of the PFD criteria and NFIP floodplain management ordinances to provide protection to these areas from man-made alterations. The investigation will also be focused on the hazard identification and mapping criteria established by the NFIP regulations and FEMA coastal guidelines and specifications.

Coastal A Zone Study

Flood hazard identification under the NFIP divides coastal flood hazard areas into two flood zones: Zone VE and Zone AE. Present NFIP regulations make no distinction between the design and construction requirements for coastal AE Zones and riverine AE Zones. However, evidence, including post-storm investigations and laboratory tests, suggests that design and construction requirements in some portions of coastal AE zones should be more like VE Zone requirements. In addition, insurance policy premiums in these areas need to be evaluated to ensure that they are actuarially rated.

Results of the PFD and Coastal A Zone studies will include an assessment of flood insurance actuarial and economic impacts; and development of floodplain mapping, floodplain management, mitigation, and insurance policy recommendations. The draft results of these studies should be completed in late Spring of 2009. Results from the PFD

and Coastal A Zone studies will be incorporated into the final summary on the actuarial and economic impacts of each recommendation on the NFIP.

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