

Appendix C: Hazard & Risk Assessment Maps

Appendix C contains hazard boundary and risk assessment maps. Using county and municipal GIS capabilities, facility inventory lists and property appraiser databases, and other local, regional, state and national agency databases, the LMS is able to map any location-specific hazard risk or event and estimate associated physical and financial losses, on demand. A representative sample of hazard maps available for risk assessment, strategy development, and other mitigation planning activities are presented in the following sections of this appendix.

The maps and data in this appendix are presented in partial fulfillment of the following FEMA requirements:

Requirement §201.6(c)(2)(i): The risk assessment **shall** include a] description of the type ... of all natural hazards that can affect the jurisdiction.

Requirement §201.6(c)(2)(i): The risk assessment **shall** include a] description of the ... location and extent of all natural hazards that can affect the jurisdiction. The plan **shall** include information on previous occurrences of hazard events and on the probability of future hazard events.

Requirement §201.6(c)(2)(ii): The risk assessment **shall** include a] description of the jurisdiction's vulnerability to the hazards described in paragraph (c)(2)(i) of this section. This description **shall** include an overall summary of each hazard and its impact on the community.

Requirement §201.6(c)(2)(ii): The risk assessment] **must** also address National Flood Insurance Program (NFIP) insured structures that have been repetitively damaged floods.

Requirement §201.6(c)(2)(ii)(A): The plan **should** describe vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard area.

Requirement §201.6(c)(2)(ii)(B): The plan **should** describe vulnerability in terms of an] estimate of the potential dollar losses to vulnerable structures identified in paragraph (c)(2)(ii)(A) of this section and a description of the methodology used to prepare the estimate.

Requirement §201.6(c)(2)(ii)(C): The plan **should** describe vulnerability in terms of] providing a general description of land uses and development trends within the community so that mitigation options can be considered in future land use decisions.

Requirement §201.6(c)(2)(iii): For multi-jurisdictional plans, the risk assessment **must** assess each jurisdiction's risks where they vary from the risks facing the entire planning area.

Further risk assessment detail pertinent to these FEMA requirements are contained in Section 3.0, in Appendix A, in the Palm Beach County Hazard Environment section, and in the newly formatted, completed or nearly completed hazard write-ups.

There are three sets of maps included in this appendix. The first set of maps displays the boundaries for each specific hazard relative to municipal and county boundaries. The second set of maps depicts the type and number of critical facilities and infrastructure that would be at risk from each type of hazard. Accompanying this second set of maps are brief narrative assessments

of the risk posed by each type of hazard and a listing of critical facilities and infrastructure, by jurisdiction, at risk. Appraised property values are included to assist in estimating potential pre-disaster exposures and post-disaster dollar losses. The third set of maps included in this appendix is a representative compilation of other types of planning information available for mitigation activities.

For purposes of risk assessment, facilities were considered “critical facilities” based on their importance in delivering vital services, protecting residents, providing for the needs of special populations, and other considerations. The types of critical facilities and infrastructure presented include: schools, police and fire stations, select government buildings, nursing homes, assisted living facilities, hospitals, shelters, the Herbert Hoover Dike, Turnpike, I-95, water treatment facilities, waste water treatment facilities and airports.

Notes:

For security reasons, critical facility listings and property values are excluded from publicly distributed copies of the LMS plan.

The LMS recognizes that some loss estimates are overstated because entities share common facilities and the database has no way of splitting property value data. Planners are cautioned to consider this duplication in their risk assessments. The value of some properties is listed at \$0.00. This means no property appraisal data was available in the database...not that the property has no value.

**PALM BEACH COUNTY
HAZARD MAP
PRIMARY DATA SOURCES**

Map	Source	Date
FIRM "A" Zones	FEMA	Oct. 2003
Historical Flood Prone Areas	South Florida Water Mgt. District	Oct. 2003
Storm Surge Areas	Army Corps of Engineers	Oct. 2003
Evacuation Zones	PBCDEM LIDAR/Army Corps of Engineers	Oct. 2003
Coastal Erosion Boundary	PBC Environmental Resources Mgt.	Oct. 2003
Hebert Hoover Dike Breach Reach	South Florida Water Mgt. District	Oct. 2003
Wellfield Protection Zones	PBC Environmental Resources Mgt.	Oct. 2003
Wildland Fire Areas	Dept. Forestry/PBC Fire-Rescue	Oct. 2003
Radiological Ingestion Pathway Zone	Florida Power & Light	Oct. 2003
Muck Fire Areas	PBC Environmental Resources Mgt.	Oct. 2003
Transportation Areas	PBC Public Safety GIS	Oct. 2003
Hurricane Peak Wind Potentials	National Weather Service/National Hurricane Center	Oct. 2003
Other County-wide Hazard Threats (Tornado, Extreme Temps, etc.)	PBC Public Safety GIS	Oct. 2003
Agricultural Pests	PBC Environmental Resources Mgt.	Oct. 2003
Tsunami Buffer	Tsunami Society	Oct. 2003

INDEX OF FACILITY ABBREVIATIONS

GOV	Governmental Facility
FD	Fire Department Facility
PD	Police Department Facility
NSG	Nursing Home
ALF	Assisted Living Facility
WTP	Water Treatment/Water Control District Facility
WWTP	Waste Water Treatment Facility

PALM BEACH COUNTY HAZARD MAPS

WITH JURISDICTIONAL BOUNDARIES

- Flood Hazards – Flood Prone Areas C-4
- Hurricane – Peak Wind Speed Potentials C-5
- Storm Surge C-6
- Evacuation Zones C-7
- County-Wide Hazards C-8
- Agricultural Pests C-9
- Wildland Fires C-10
- Muck Fires C-11
- Coastal Beach Erosion C-12
- Tsunami Threat C-13
- Transportation System Hazards C-14
- Radiological Hazard C-15
- Wellfield Hazards C-16
- Dike Breach C-17