

TREASURE COAST REGIONAL PLANNING COUNCIL

MEMORANDUM

To: Council Members

AGENDA ITEM 12

From: Staff

Date: September 16, 2016 Council Meeting

Subject: 2016 Regional Hurricane Evacuation Study Update

Introduction

As part of a legislative initiative to enhance statewide evacuation planning and preparedness, the Florida Division of Emergency Management (FDEM) contracted with the regional planning councils to develop regional evacuation studies across the state. This collaborative and cooperative effort among the ten regional planning councils and FDEM produced the first consistent up-to-date picture of integrated multi-regional and statewide evacuation dynamics.

In 2010, the Council released the Treasure Coast Regional Evacuation Study. This comprehensive study encompassed Indian River, Martin, Palm Beach, and St. Lucie counties. The regional transportation and roadway networks were integrated with four adjacent regions of East Central, Central, South, and Southwest Florida to further efforts in evacuation planning and execution for hurricane and other catastrophic events requiring mass evacuation.

In 2013 and 2016, updates to the Demographics, Hazards and Vulnerability, Shelter, and Transportation Analyses volumes and chapters were completed and delivered to the emergency management officials in each county.

Background

In response to the devastating 2004 and 2005 hurricane seasons, House Bills (HB) 1359 and 7121 were passed by the legislature in 2006 creating the framework for Statewide Study initiative. These bills prioritized measures to minimize loss of life, loss of property, and post-storm disruption resulting from hurricanes. HB 1359 defined the Coastal High Hazard Area as the Category 1 Storm Surge Zone. HB 7121 centered on the need to improve the state's disaster response infrastructure for effective evacuation planning, thus FDEM, in partnership with the regional planning councils, developed a program to conduct these studies.

The Regional Hurricane Evacuation Study includes detailed analyses of demographics and land uses, hazards, evacuation behavior, shelters, and evacuation transportation networks. The study's data and analysis utilized LIDAR (Light Detection and Ranging) data and SLOSH (Sea, Lake

and Overland Surge from Hurricanes) flood and inundation modeling to produce regional vulnerability and transportation analyses for each county.

Conclusion

Council staff has completed and released the 2016 Regional Supplemental Summary. Several sections of the Treasure Coast Regional Evacuation Study were updated and this supplemental document summarizes updates and key findings in Volume 1: Technical Data Report; Demographics, Hazards Analysis, and Vulnerability and Population Analysis. The study is located on Council's website at: http://www.tcrpc.org/special_projects/RES/RES_Home.html.

The majority of the supplemental document is comprised of maps and data tables, which analyze vulnerability of each county's population; critical facilities and housing units based on storm surge; Federal Emergency Management Agency flood zones; and wildfire risks. The document provides a regional updated analysis with representative maps and county appendices with additional specific analysis data designed to provide emergency management officials with updated information for planning considerations. Attached are samples of the maps contained in each of the county-specific appendices.

Recommendation

For information only.

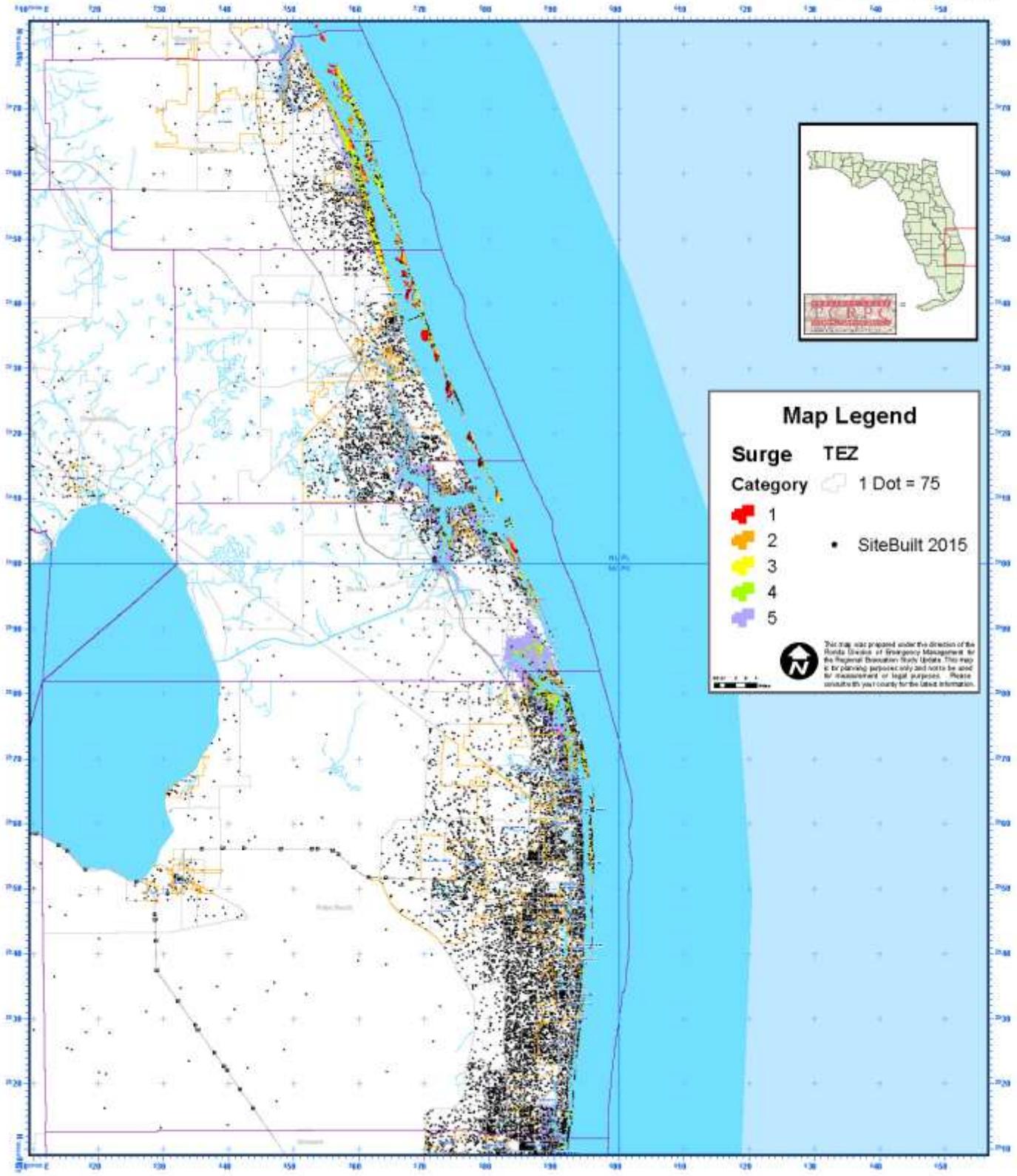
Attachments



Treasure Coast Region

Map 1 - Regional Site-Built Home Density

2016 Evacuation Study Summary Update

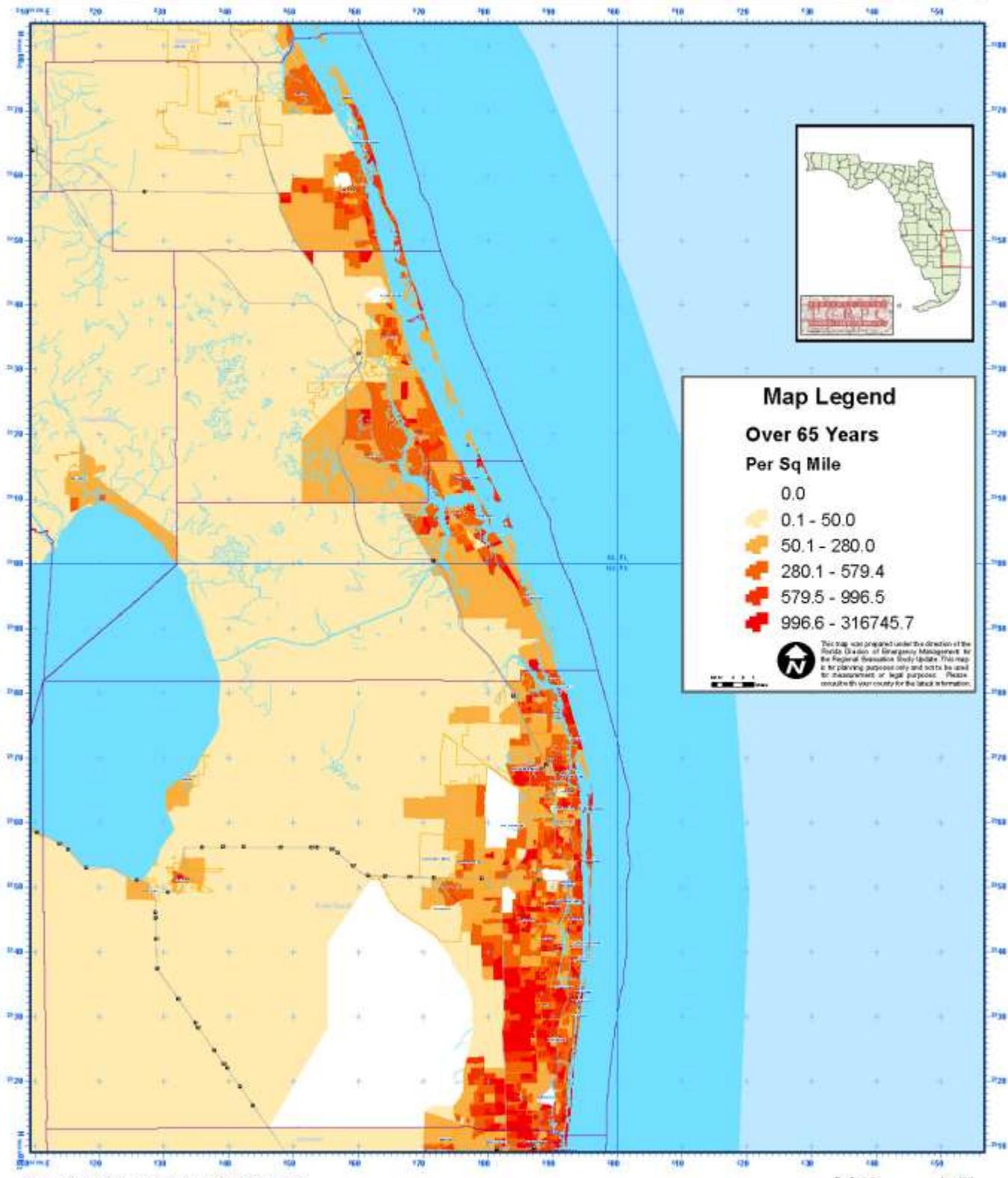




Treasure Coast Region

Map 4 - Regional Over 65 Population Density

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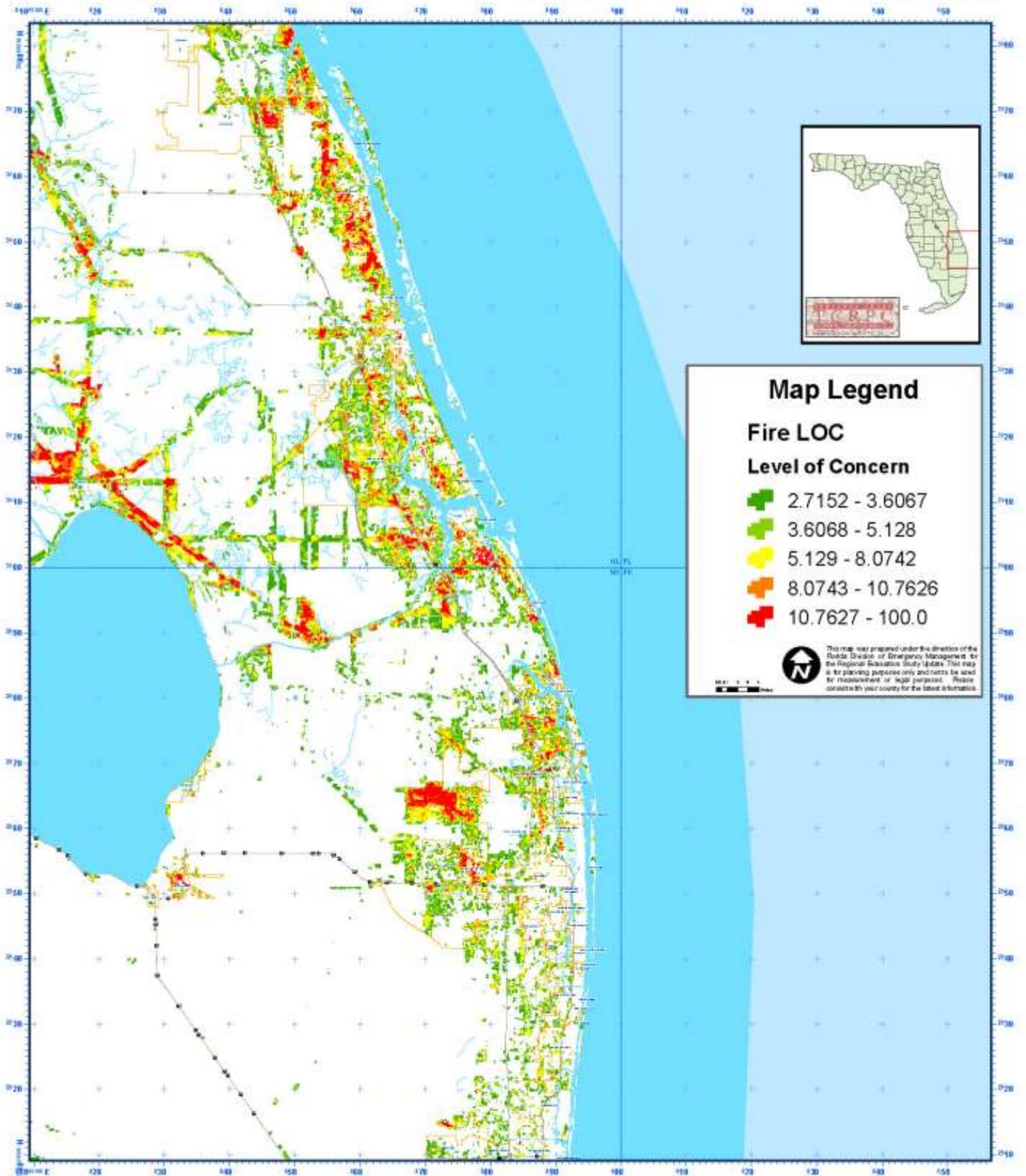




Treasure Coast Region

Map 9 - Regional Wildfire Risk

2016 Evacuation Study Summary Update



Map Legend

Fire LOC

Level of Concern

- 2.7152 - 3.6067
- 3.6068 - 5.128
- 5.129 - 8.0742
- 8.0743 - 10.7626
- 10.7627 - 100.0

This map was prepared under the direction of the Florida Division of Emergency Management for the Regional Evacuation Study Update. This map is for planning purposes only and not to be used for measurement or legal purposes. Please consult with your county for the latest information.

Sources: USGS, United States Census Bureau, National Hurricane Center

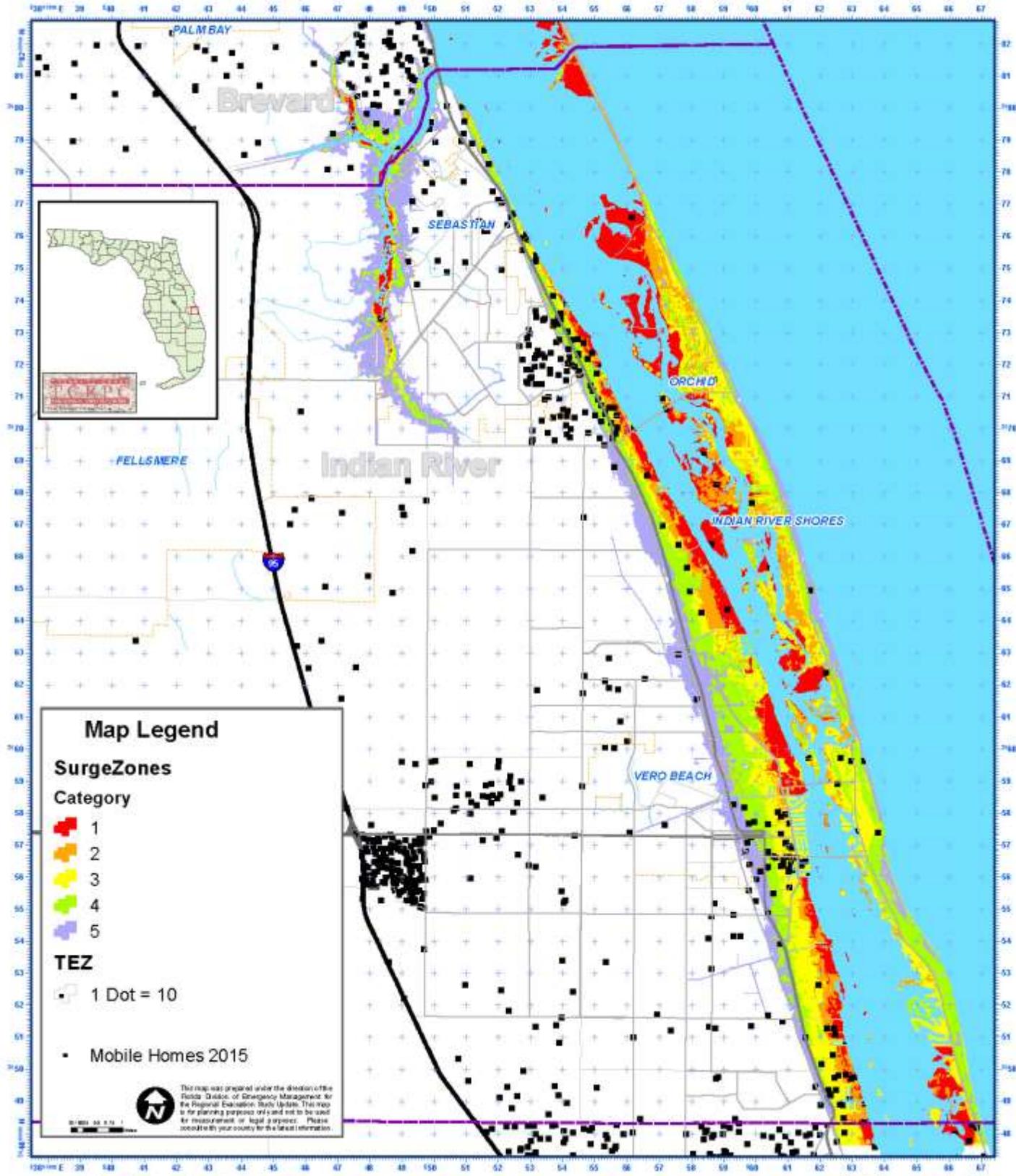
Map Printed: Apr, 2016



Indian River County

Map B2 - Mobile Home Density

2016 Evaluation Study Summary Update



Map Legend

SurgeZones

Category

- 1 (Red)
- 2 (Orange)
- 3 (Yellow)
- 4 (Light Green)
- 5 (Purple)

TEZ

- 1 Dot = 10 (Black square)
- Mobile Homes 2015 (Black dot)

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Sources: USGS, United States Census Bureau, National Hurricane Center

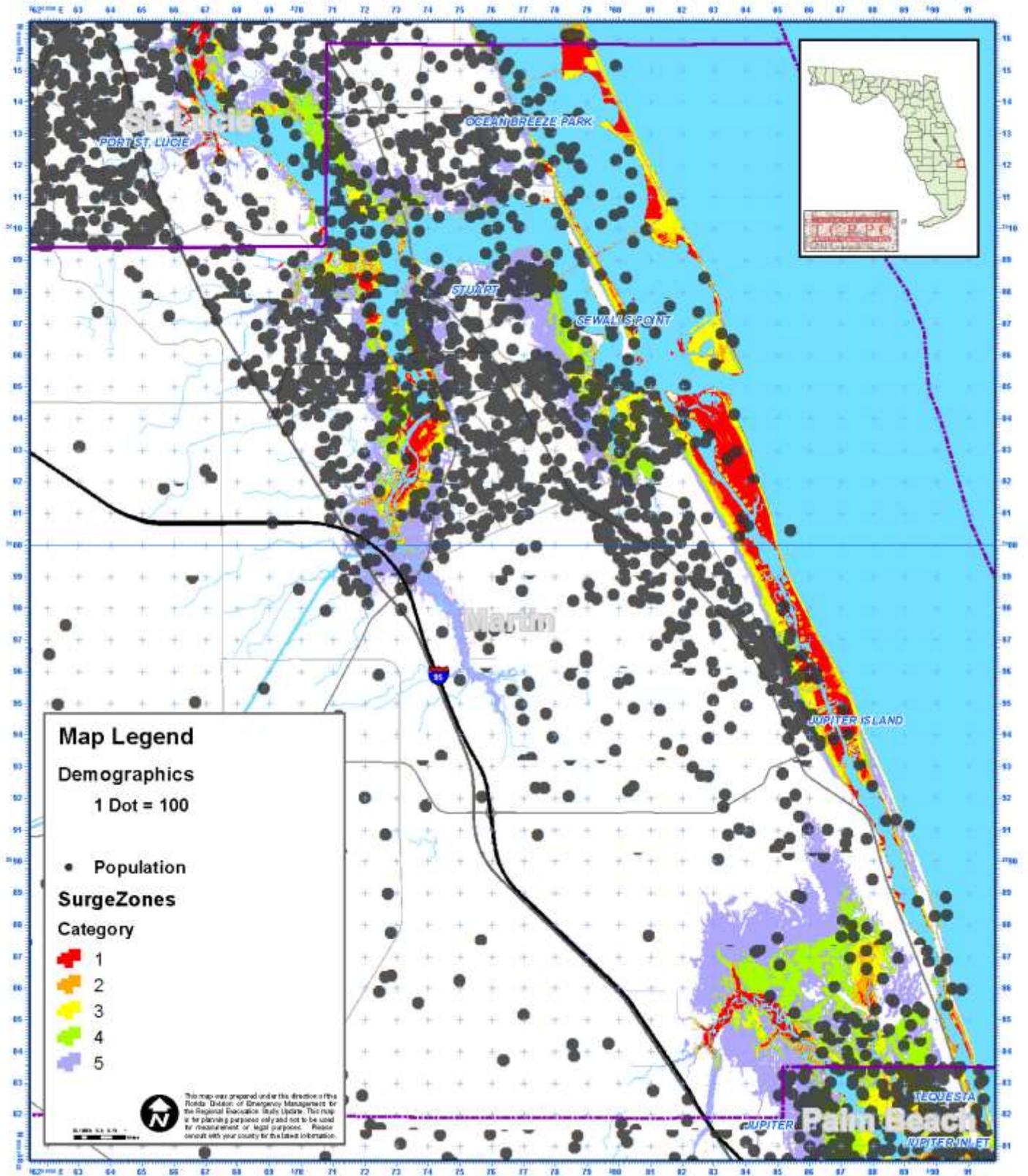
Map Printed June, 2016



Martin County

Map D1 - Population Density

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Sources: USGS, United States Census Bureau, National Hurricane Center

Map Printed

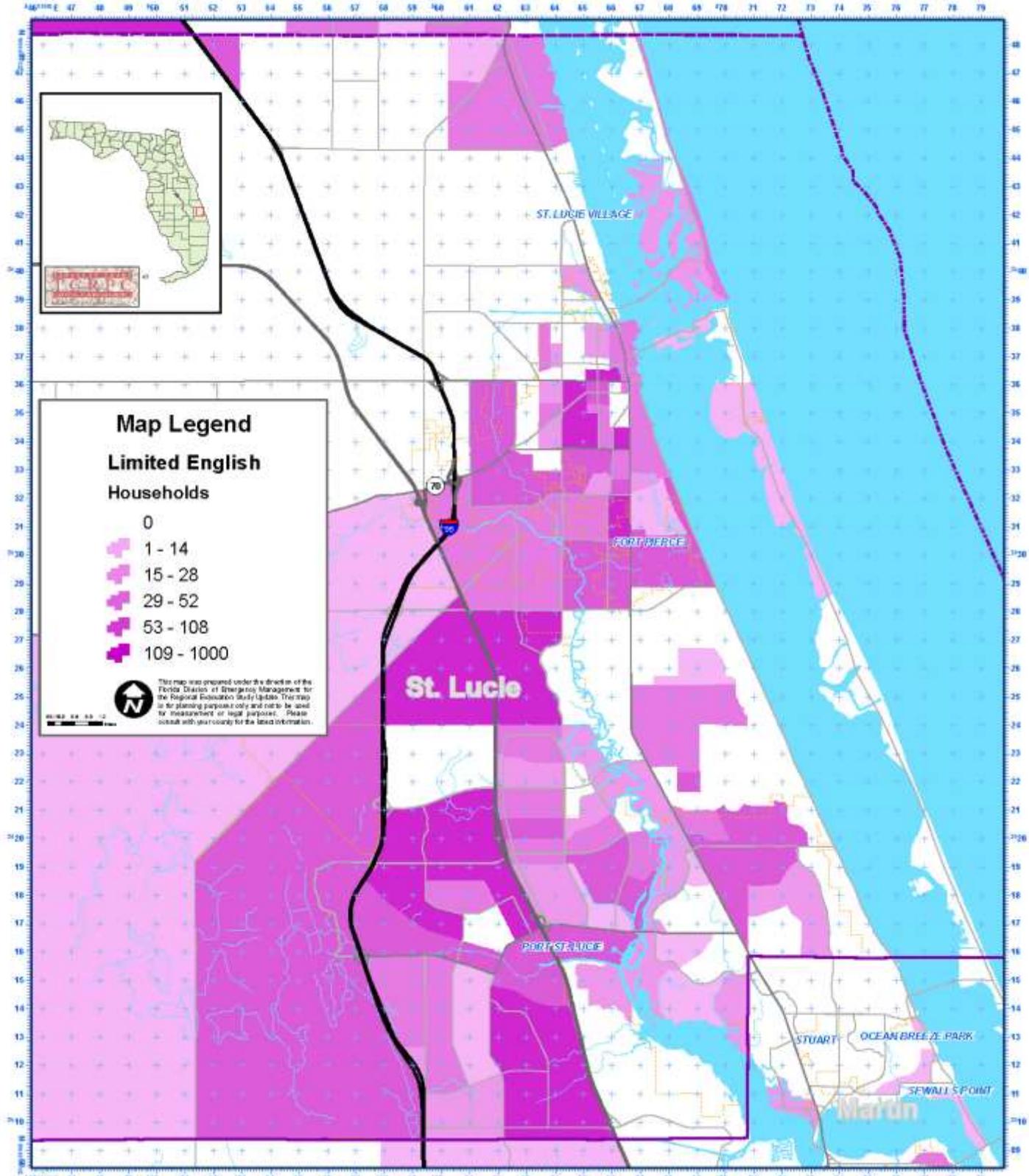
June, 2016



St Lucie County

Map D5 - Limited English Speaking Households

2016 Evacuation Study Summary Update



Sources: USGS, United States Census Bureau, National Hurricane Center

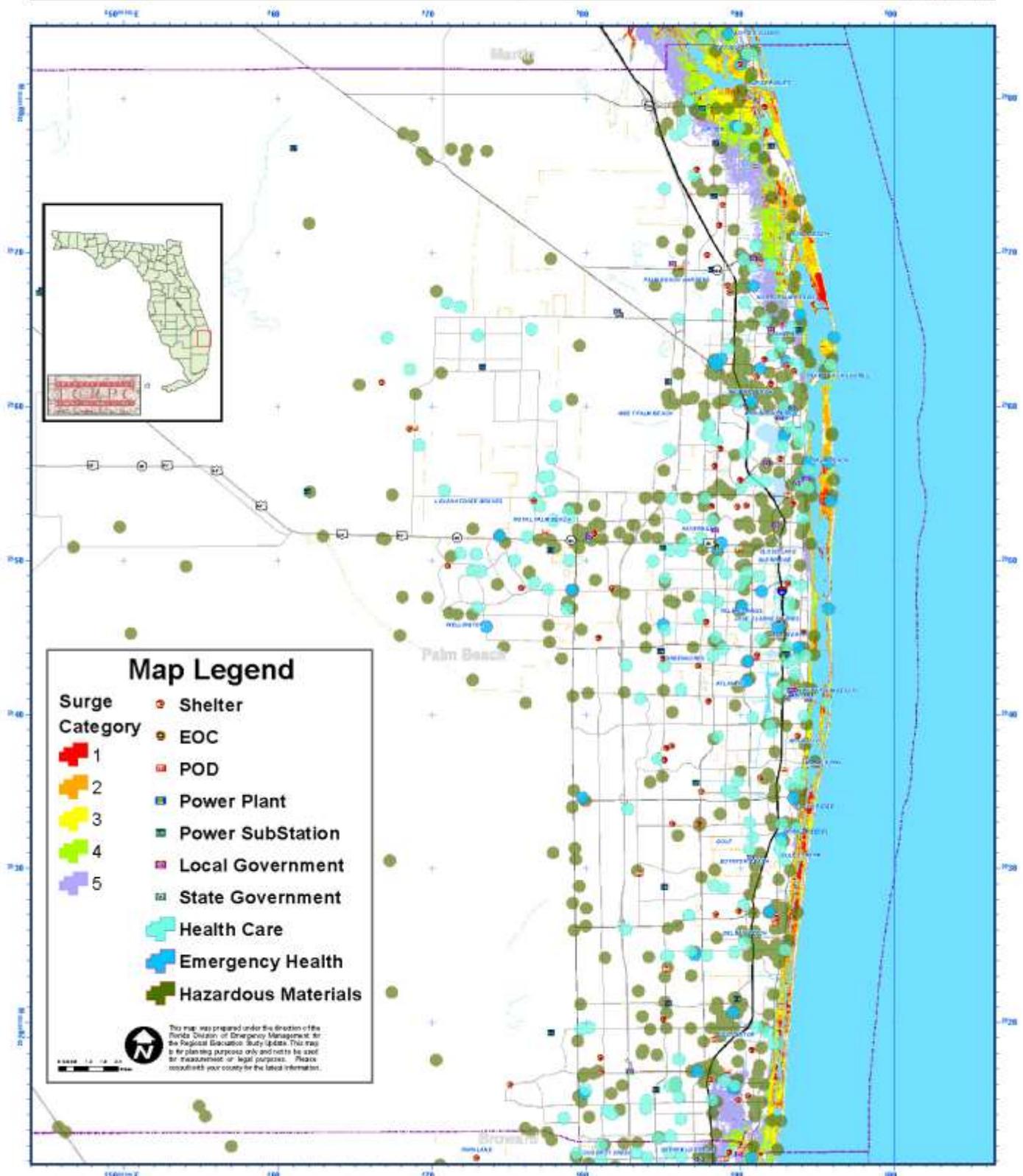
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June, 2016



Palm Beach County Map F1 - Selected Critical Facilities

2016 Evacuation Study Summary Update



Sources: USGS, United States Census Bureau, National Hurricane Center