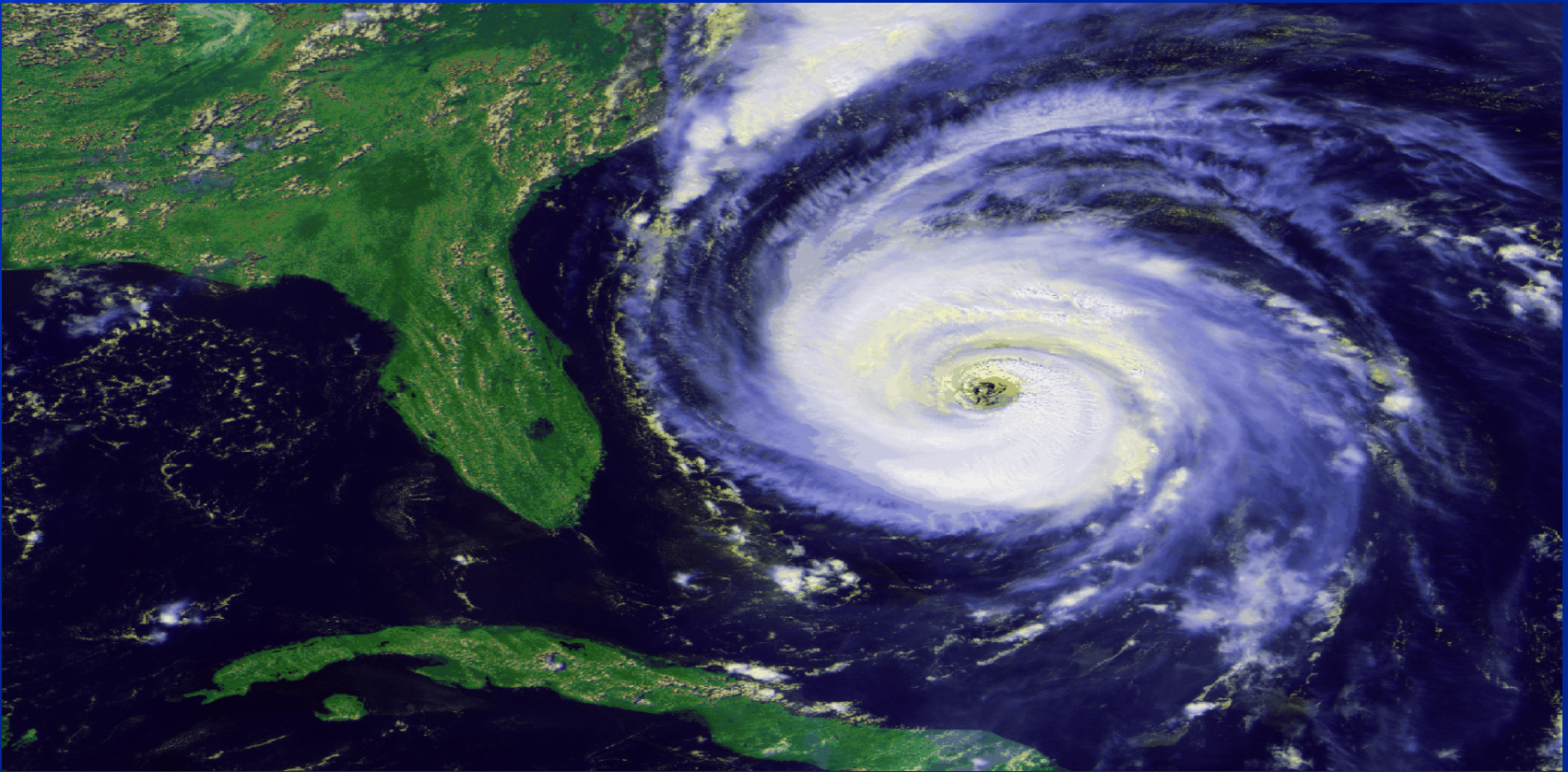
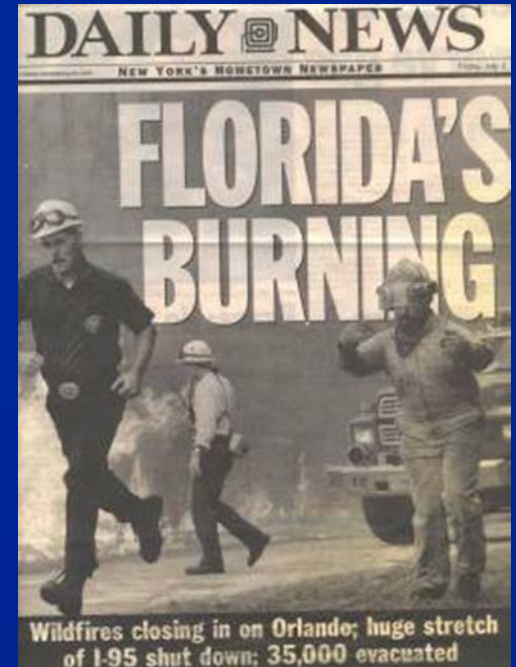
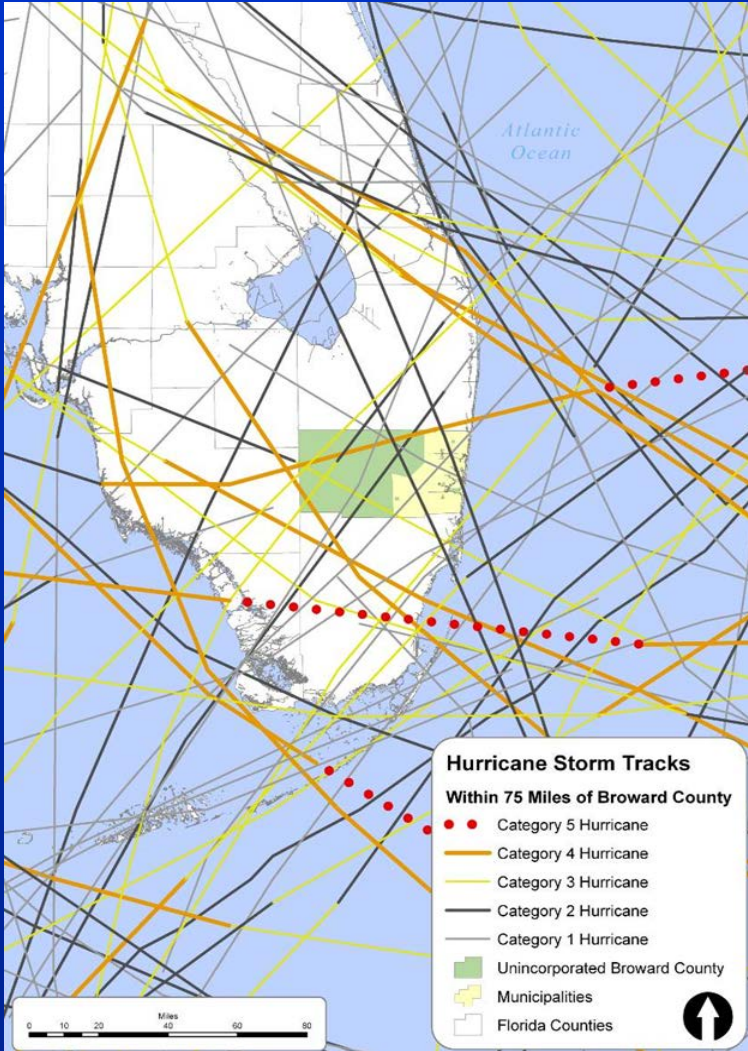


Hurricane Resilience, Vulnerability and Risk Awareness: Integrating Mitigation and Climate Resilience Planning in Broward County



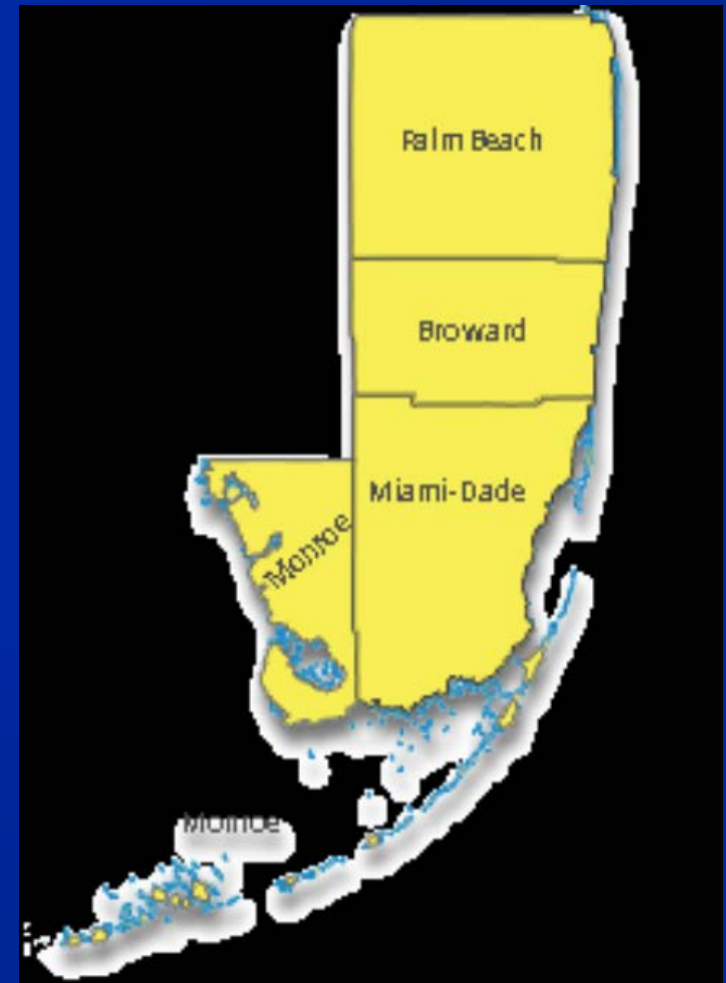
Florida International University
The Metropolitan Center
School of International and Public Affairs
June 24, 2015

Why Plan?





- 6.1 million population in South Florida
- Over 100 Municipalities
- 4 Ports
- 2 Major Sports Arenas
- 4 International Airports
- Close proximity to 2 Nuclear Power Plants
- 2 Major Military Installations



Overarching Goals of Emergency Management

- Prevention/Mitigation
- Planning/Preparedness
- Response
- Recovery

AT ALL TIMES:

Resiliency—the ability to withstand, adapt, and recover

Mitigation

Reducing the loss of life and property by lessening the impact of disasters

Recovery

Putting a community back together after a disaster



Preparedness

Getting people and equipment ready to quickly and effectively respond to a disaster before it happens

Response

Saving life and property during and immediately after a disaster

Presidential Policy Directive PPD-8



National Preparedness System

November 2011



Homeland
Security

- The purpose of the NPS is to describe the efforts for how the nation plans to "build, sustain and deliver" the core capabilities necessary to fulfill the National Preparedness Goal.
- NPS is the Nation's instrument for achieving the goal of a "secure and resilient Nation."

Mitigation within PPD-8



The Framework requires FEMA to weave mitigation throughout the National Preparedness System.

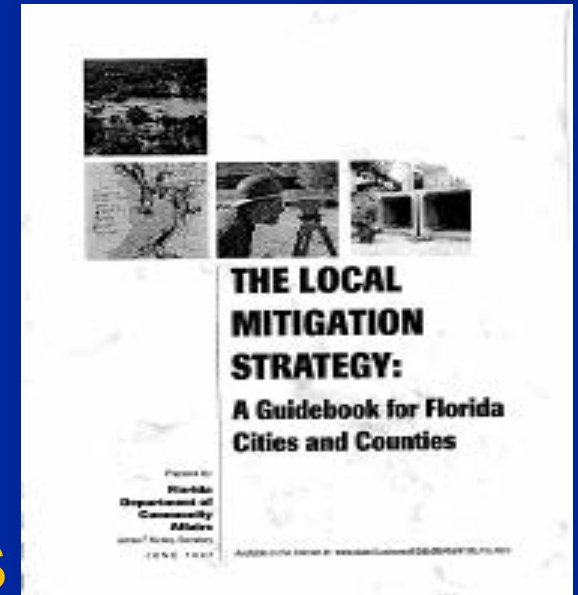
“the unrelenting pursuit of risk informed decisions and actions that increase resiliency”

Local Mitigation Planning

- Required by 44 CFR § 201.6 and Disaster Mitigation Act of 2000 for federal mitigation dollars
- Must be renewed and updated every 5 years
- Requires a risk and vulnerability analysis
- End result is a list of goals to achieve and **mitigation** projects to complete
- One of the most successful ways to identify **mitigation** projects and bring people together for a common cause

Florida LMS Program

- Launched in 1998
- \$9M statewide program
- Multi-jurisdictional plans
- Emphasis on mitigation projects
 - Pre-identified, structural projects for hazard mitigation grant funding were to be determined by consensus of a local, countywide LMS task force.



Broward County Enhanced LMS

**First Enhanced
LMS in the State!**



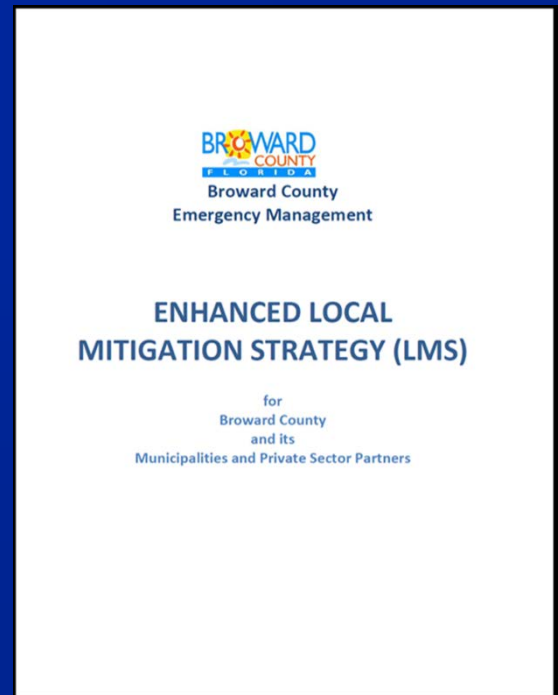
Broward ELMS Plan

- Chapter 1 – Introduction
- Chapter 2 – Broward County Profile
- Chapter 3 – Planning process
- Chapter 4 – Risk Assessment*
- Chapter 5 – Economic Vulnerability**
- Chapter 6 – Mitigation Initiatives
- Chapter 7 – Plan Maintenance

**Sea Level Rise/Climate Change added*

**THIRA (Future)*

***New Chapter 2012*



Planning Process – Key Steps

- Risk Assessment
 - Hazard identification and analysis
 - Vulnerability assessment
- Capability Assessment
- Mitigation Strategy
 - Goals and objectives
 - Specific mitigation actions/projects
- Plan Maintenance Procedures
- Adoption and Implementation

Broward ELMS: What's New?

Enhancements and Updates to Risk Assessment:

- Updated risk and hazard profile information for hazards impacting Broward County
- Preparation of new sea level rise subsection that depicts in maps the parts of Broward County impacted by different sea level rise scenarios and loss estimations
- Preparation of new Economic Vulnerability Chapter which has loss estimates and potential impacts from high wind and flooding in key economic areas in Broward County
- Preparation of new Housing Vulnerability appendix

Broward ELMS: What's New?

Benefits for Participation in Mitigation Program:

- Adherence to Emergency Management Accreditation Program (EMAP) mitigation standards
- Compliance with new DMA 2000 plan review standards
- Adherence to draft State enhanced LMS guidelines
- Conformance with Department of Homeland Security (DHS) Presidential Policy Directive-8 (PPD-8) National Preparedness System mitigation core capabilities
- Leverage the ELMS plan and planning process to bolster cooperation amongst existing NFIP Community Rating System (CRS) programs in Broward County

Broward ELMS: What's New?

Opportunities for Plan Integration:

- Advanced integration with the County's Recovery Plan
- Initial steps taken to better integrate with other community planning processes to determine areas of mutual interest
- More robust participation by businesses and private sector in mitigation planning process
- Revised project prioritization criteria that emphasizes elements critical to FEMA mitigation grant program eligibility
- Integration with Climate Change Task Force to identify overlapping opportunities and potential mitigation projects

Regional Climate Change Action Plan



A Region Responds to a Changing Climate

Southeast Florida Regional Climate Change Compact Counties

Regional Climate Action Plan

October 2012



110 Actions

- Sustainable Communities & Transportation Planning
- Water Supply, Management & Infrastructure
- Natural Systems
- Agriculture
- Energy & Fuel
- Risk Reduction & Emergency Management
- Public Outreach
- Public Policy

Risk Reduction & Emergency Management

- **GOAL:** Provide a more resilient natural and built physical environment in light of climate change.
- Perform infrastructure vulnerability assessment and economic impact
- Improve adaptation response for at-risk communities
- Incorporate climate into LMS
- Identify impacts to transportation assets
- Implement and enforce building codes



A Region Responds to a Changing Climate

Southeast Florida Regional Climate Change Compact Counties

Regional Climate Action Plan

October 2012



Broward Courthouse Retrofit Impact Resistant Glass

Funded by Pre-Disaster Mitigation Grant in 2004.
Federal Share of project: \$728,512.



Sunrise Senior Center

Perforated Panels and Screens

Funded by HMGP after Hurricane Katrina



Ft. Lauderdale Police Department Elevated Electrical Room

Funded under HMGP after Hurricane Wilma



Water Control Structure Drainage Project

Funded under HMGP after Hurricane Wilma

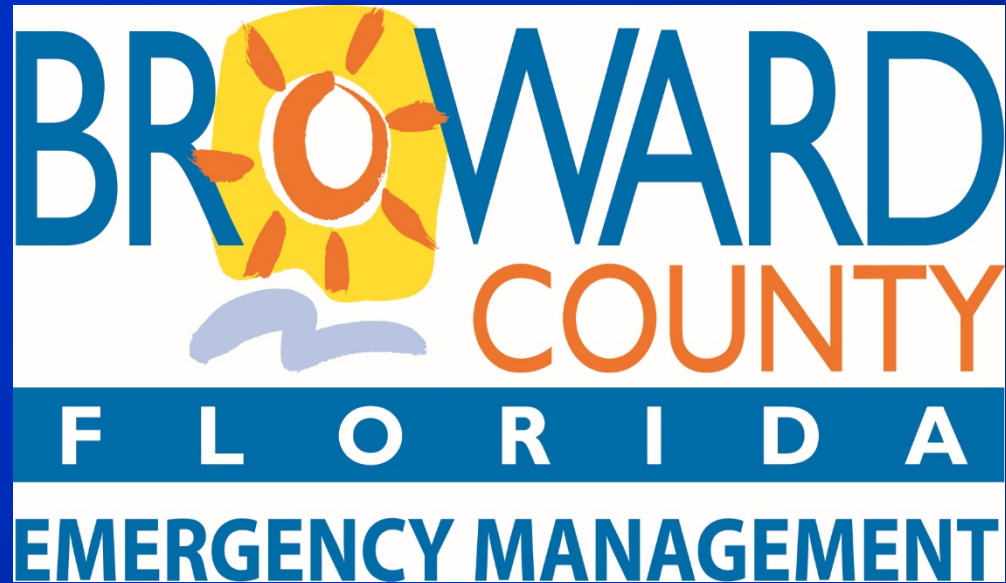


Why Plan?



"AAHHH, FLORIDA"

MacLugor
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FORT MYERS
NEWS-PRESS



Broward Emergency Management Division

Miguel Ascarrunz, Director

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www.broward.org/hurricane

