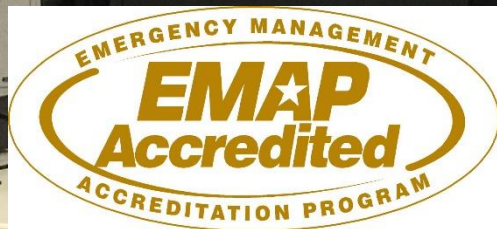


PARTNERSHIP AND COORDINATION WITH EMERGENCY MANAGEMENT

WMO Workshop



MIAMI-DADE COUNTY OVERVIEW

- 2,000 square miles
- World's busiest cruise port
- 2.6 million residents
- Second busiest US airport for international travelers
- Gateway to the Caribbean and Latin America



ALL HAZARDS RISKS

**Hazardous
Materials**



Mass Migrations



**Wildland
Fires**



Tornadoes



Hurricanes



Pandemics



Terrorism

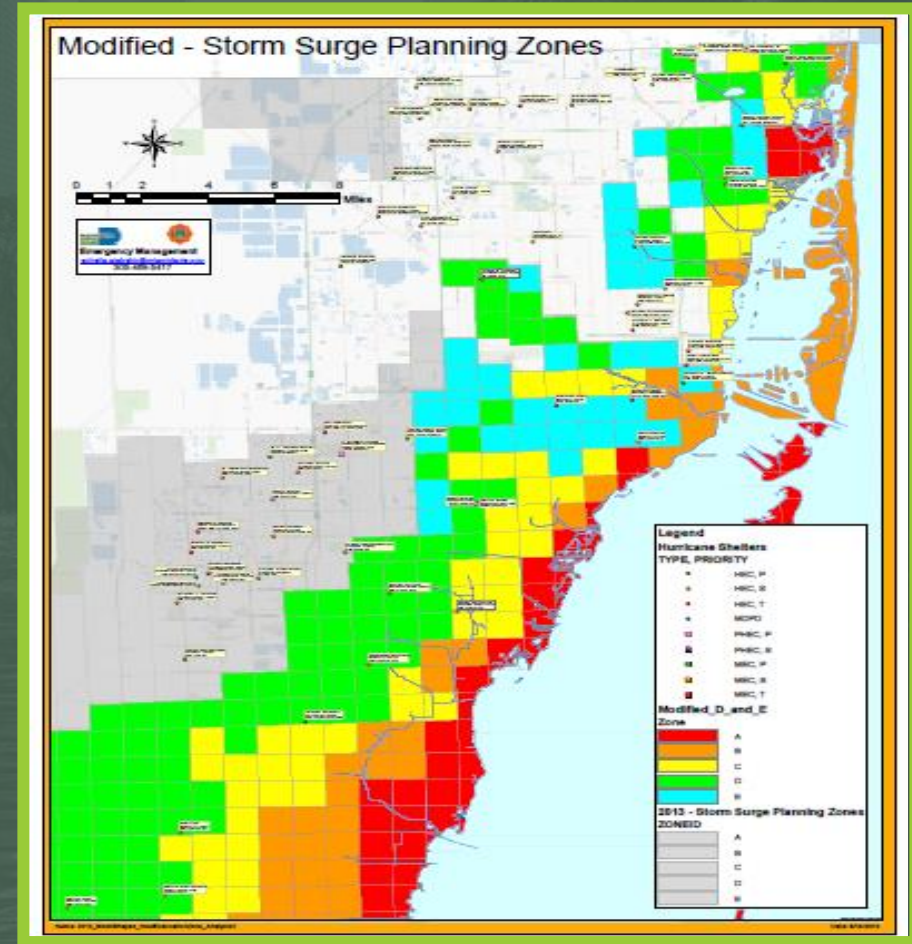
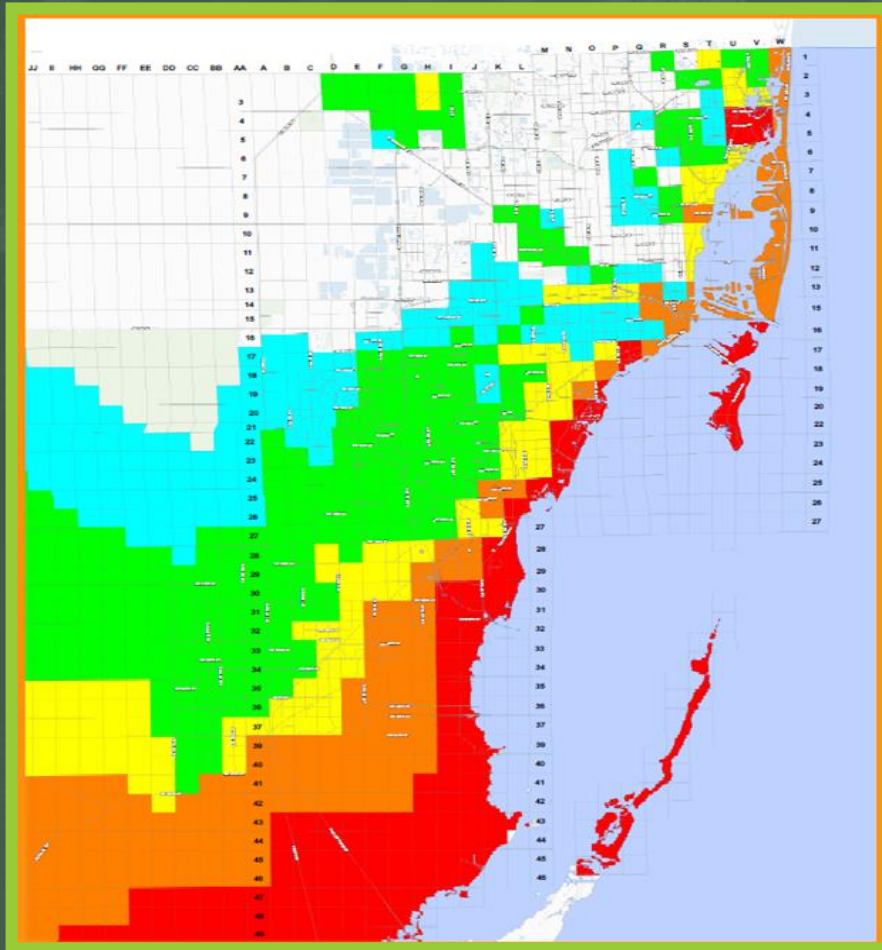


**Major
Events**

Floods



STORM SURGE PLANNING VS. EVACUATION PLANNING



KNOWYOUR ZONE!

Storm Surge Zone Finder

- Allows residents to identify what surge zone they are in
- Available on miamidade.gov

Services Near You

miamidade.gov

Back to Services

Search By: Address Intersection Landmark

Enter the address and click Locate. Use the Tab key to switch between fields or click using the mouse.

House Number:

Direction:

Street Name:

Street Type:

Zip Code (opt):

Locate

What is my...?

- [Census Information](#)
- [Community Council](#)
- [Community Development Block Grant Area](#)
- [Community Development District](#)
- [Community Redevelopment Area](#)
- [County Commission District](#)
- [County Police District and Grid](#)
- [Empowerment Zone](#)
- [Enterprise Zone](#)
- [FEMA Flood Zone](#)
- [Garbage Pickup Days](#)
- [Municipality](#)
- [Neighborhood Revitalization Strategy Area](#)
- [Recycling Pickup Days](#)
- [School Board District](#)
- [School Boundaries](#)
- [Storm Surge Planning Zone](#)
- [Targeted Urban Area](#)
- [Township-Range-Section](#)
- [Voting Precinct](#)
- [Water and Sewer Service Areas](#)
- [Zip Code](#)

Storm Surge Planning Zones Map

ACTIVE TOOL: ZOOM IN

Legend

Storm Surge Planning Zone

- A
- B
- C
- D
- E
- Highway

Other GIS Map Services

- [My Neighborhood](#)
- [Property Search](#)
- [Public Notification](#)
- [eMaps](#)
- [Artificial Reefs](#)
- [Sexual Offender/Predator](#)
- [Residence Search](#)

Home | [Privacy Statement](#) | [Disclaimer](#) | [About Us](#)
[ADA Notice](#) | [Phone Directory](#)
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Map Report

Storm Surge Planning Zone:

- Zone: C
- Color: Yellow
- Grid: C35

Storm Surge Planning Zones Map

ACTIVE TOOL: ZOOM IN

Legend

Map Location

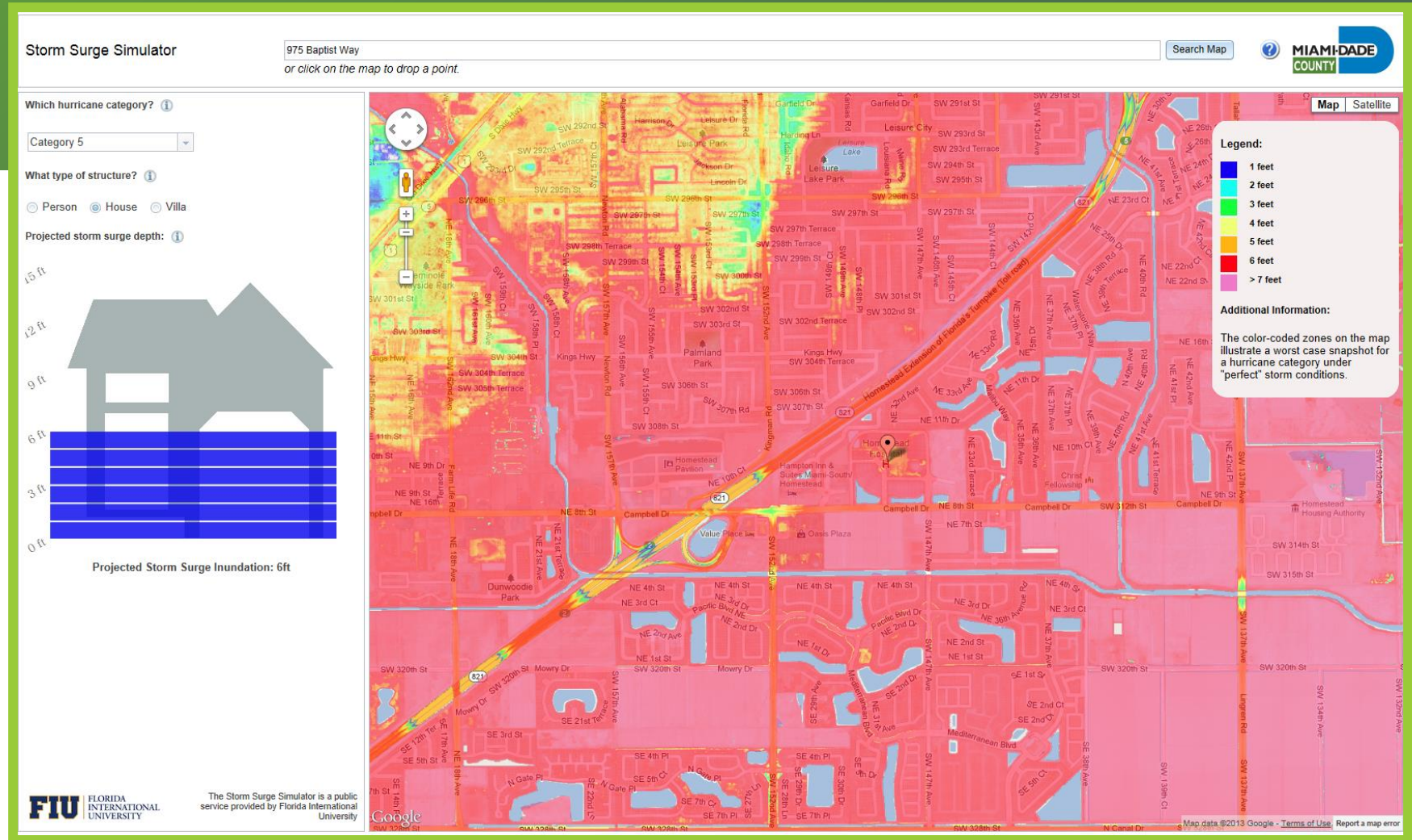
- 975 BAPTIST WAY, 33033
- Selected
- Storm Surge Planning Zone
- B
- C
- Street

Other GIS Map Services

- [My Neighborhood](#)
- [Property Search](#)
- [Public Notification](#)
- [eMaps](#)
- [Artificial Reefs](#)

STORM SURGE SIMULATOR

Partnership with FIU



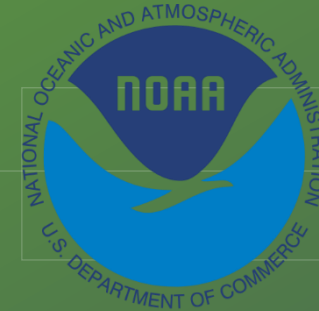
PARTNERS



Office of Emergency
Management



National Weather Service



National Hurricane Center



Florida Division of
Emergency Management



FEMA

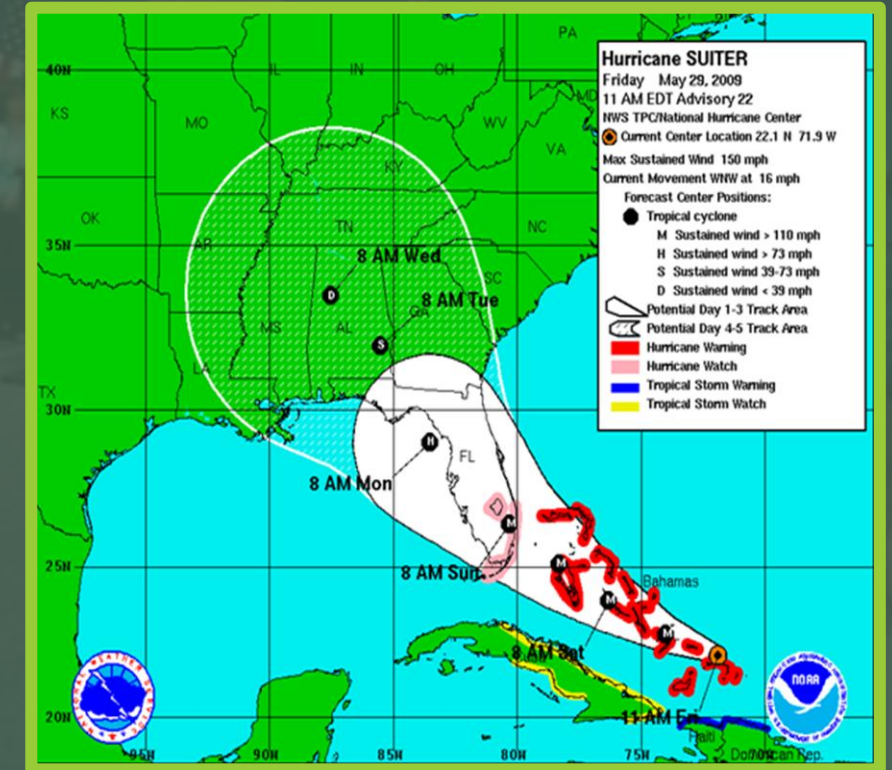
FEMA

PROTECTIVE ACTION DECISIONS

The Challenge

01 Interpret data correctly
Reach defensible
conclusions

02 Communicate the
data effectively



STORM ACTION LEAD TIME

SALT


SALT is a planning tool to provide emergency managers a schedule of key activities that must be accomplished to prepare for the storm and assists in this decision making process by organizing and identifying planning milestones and decision times.

Schedule

The schedule is based on an objective analysis of when an activity must commence in order to fully accomplish the task prior to arrival of tropical storm winds

Partnership with NHC & NWS

The official National Hurricane Center and National Weather Service forecasters are the exclusive storm forecasts data entered into the application



Storm Action Lead Time

Last calculated on: Never

[Print](#)

Storm Name:

NHC ADV Num:

Forward Speed:

Arrival of TSW:

Time of ADV:

Max. Sust. Wind:


Evacuation Zone:

Storm Heading:

Storm Diameter:

Calculate S.A.L.T.

Saved



Storm Action Lead Time

Last calculated on: January 6, 2015 @ 1:40 PM

[Print](#)

Storm Name:

NHC ADV Num:

Forward Speed:

Arrival of TSW:

Time of ADV:

Max. Sust. Wind:

Evacuation Zone:

Storm Heading:

Storm Diameter:

Calculate S.A.L.T.

Saving disabled

Lead Time	Date & Time to Perform Task	Task	Hours From Now
-96	Monday, January 5 2015 5:00 PM	Initial storm notification to EOC Reps	0
-78	Tuesday, January 6 2015 1:00 PM	Initiate bridge lock down discussion with stakeholder agencies	0
-72	Tuesday, January 6 2015 5:00 PM	EOC Planning Section initiate Flash Report distribution	3
-72	Tuesday, January 6 2015 5:00 PM	Designate a PIO point of contact for media	3
-72	Tuesday, January 6 2015 5:00 PM	Initiate Divisional EOC conference calls	3
-60	Wednesday, January 7 2015 5:00 AM	Begin LAP Production	15
-60	Wednesday, January 7 2015 5:00 AM	EOC to Level 2 (To support E&EAP Operations) and Prepare Mayor's Emergency Declaration for signature	15
-60	Wednesday, January 7 2015 5:00 AM	Begin E&EAP registry call down	15
-60	Wednesday, January 7 2015 5:00 AM	Notify Medical Management Facilities of tentative activation schedule	15
-60	Wednesday, January 7 2015 5:00 AM	Department Director's Briefing	15
-48	Wednesday, January 7 2015 5:00 PM	Notification to stakeholder agencies of probable drawbridge lockdown	27
-47	Wednesday, January 7 2015 6:00 PM	Disseminate "Get Ready" press release / press conference	28
-47	Wednesday, January 7 2015 6:00 PM	Update Web Page	28
-47	Wednesday, January 7 2015 6:00 PM	Extend Answer 3-1-1 Center hours	28
-44	Wednesday, January 7 2015 9:00 PM	Activate Ambulance Dispatch Center, Fire Rescue Dept., and STS to coordinate E&EAP evacuation	31
-42	Wednesday, January 7 2015 11:00 PM	Evacuate DMF clients via Ambulances and Fire Rescue	33
-42	Wednesday, January 7 2015 11:00 PM	Evacuate DMF clients via STS	33
-42	Wednesday, January 7 2015 11:00 PM	Mayor signs Emergency Declaration	33
-42	Wednesday, January 7 2015 11:00 PM	Commence Residential Shuttering Program	33
-37	Thursday, January 8 2015 4:00 AM	Begin HECs / MECS preparations : Discussions with DCPSB, ABC, DOH, MDPR Logistics, and alert DAEs	38
-36	Thursday, January 8 2015 5:00 AM	Notify medical facilities to implement evacuation plans as applicable	39
-35	Thursday, January 8 2015 6:00 AM	Notify 3-1-1 Answer Center to start entering last minute calls for assistance into E&EAP database	40
-28	Thursday, January 8 2015 12:00 PM	Close Schools	46

CLEARANCE TIMES

	Zone A Lead Time	Zone B Lead Time	Zone C Lead Time	Zone D Lead Time	Zone E Lead Time
In-County	26	28	37	56	73
Out-of-County	26	28	37	56	73

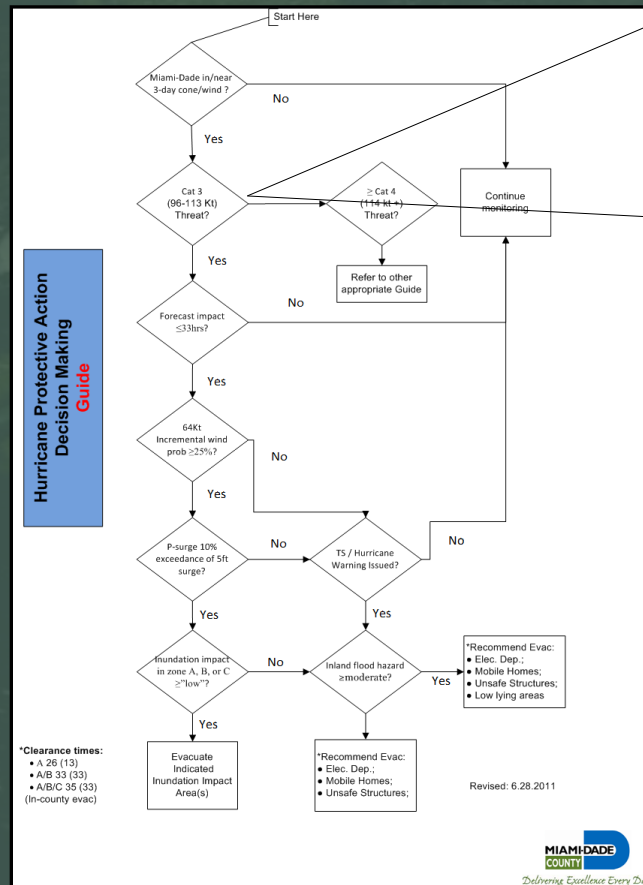
NWS GRAPHICS AND FORECAST PRODUCTS

With tropical storms and hurricanes, **it's all about impacts**

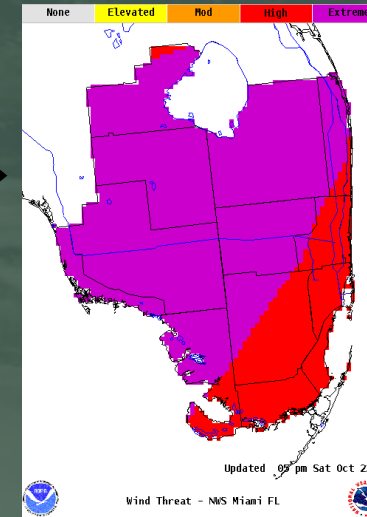
- Utilized to execute our plans
- Potential impact graphics depict the worst of all **plausible impacts and scenarios**



STORM INTENSITY



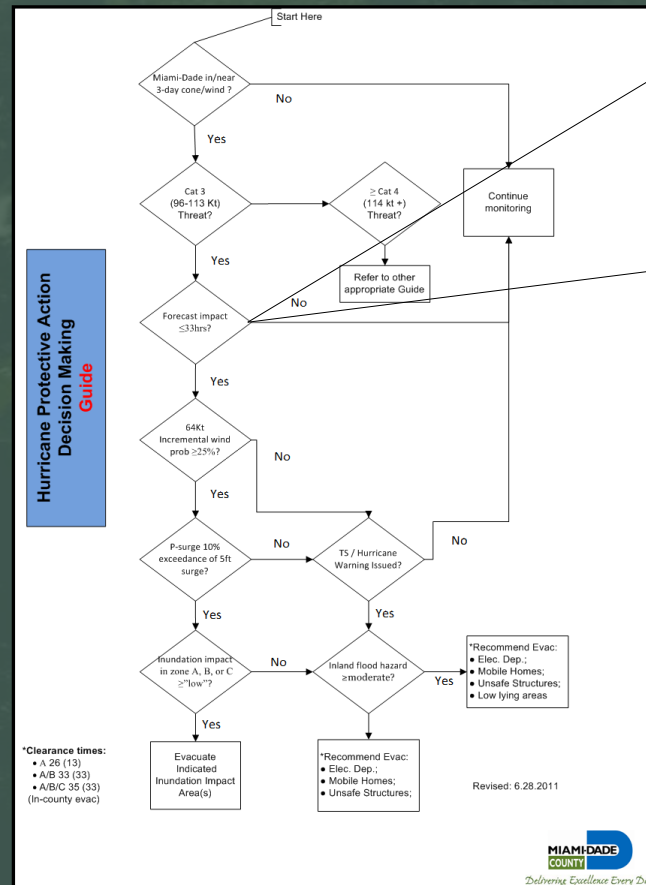
At least
Cat 3
Threat?



OR

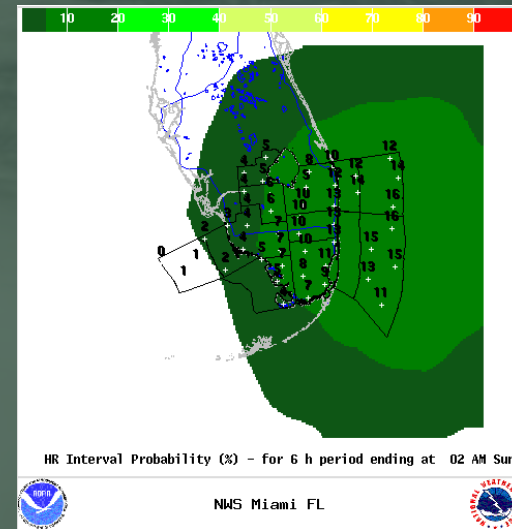
FORECAST VALID XX/XX00Z 31.4N 77.5W
MAX WIND XXX KT...GUSTS XXX KT.

CLEARANCE TIMES



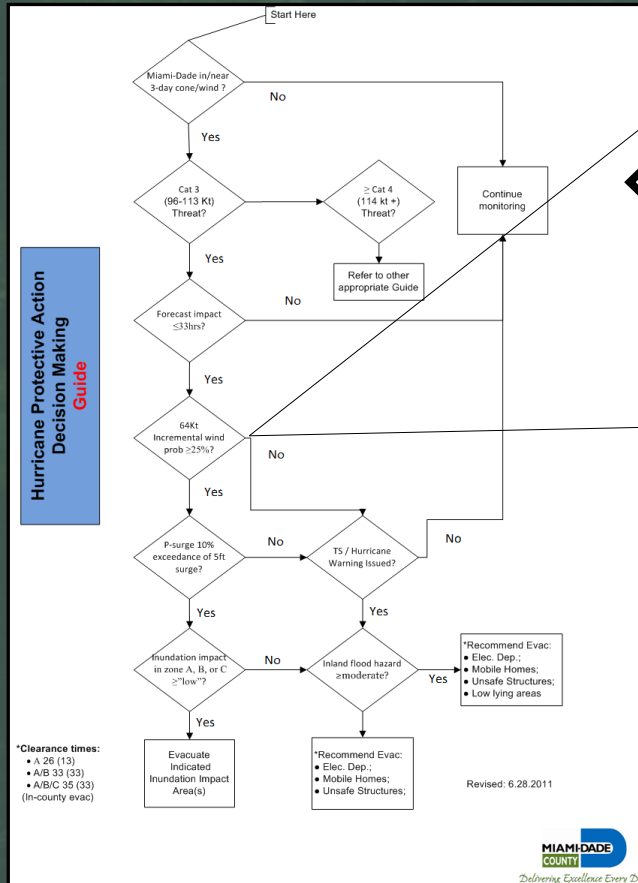
Forecast
Impact
< 37 Hrs

Available 2012 season



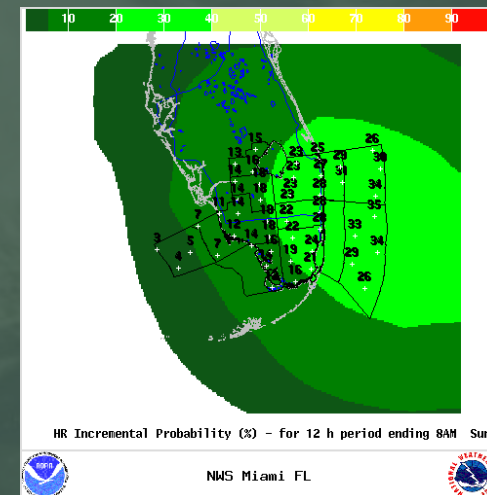
FORECAST VALID XX/XX00Z 31.4N 77.5W
MAX WIND XXX KT...GUSTS XXX KT.

WIND PROBABILITIES



64Kts
Incremental
WSP ≥ 15%

Period	2014	
	PWS64	PWS34
00-12 hr	25%	45%
13-24 hr	20%	35%
25-36 hr	15%	30%
37-48 hr	12.5%	25%
49-60 hr	10%	22.5%
61-72 hr	8%	20%
73-84 hr	7%	17.5%
85-96 hr	6%	15%
97-108 hr	5%	12.5%
109-120 hr	4%	10%

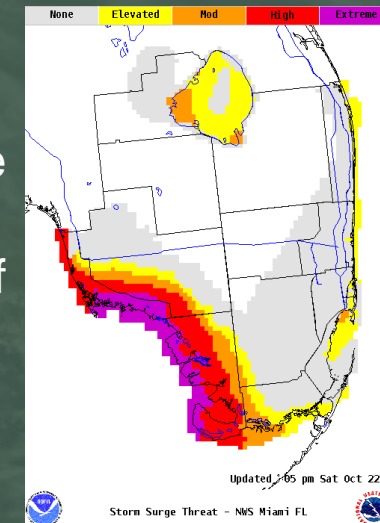
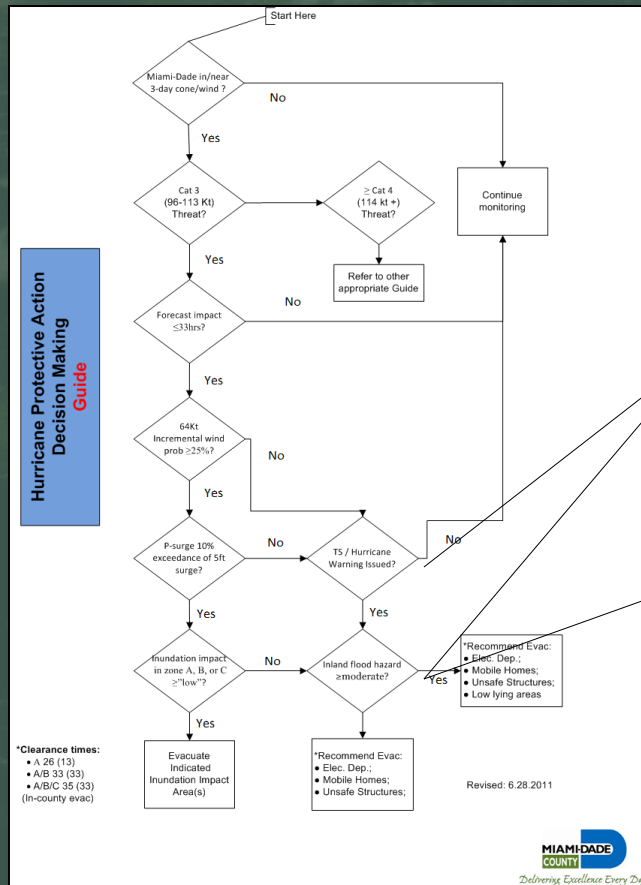


COASTAL FLOODING

PSurge2.0 in 10%
Exceedance
Cumulative Form

Inundation
Impact
in zone A, B, or C
>= "Elevated"?

Elevated— an
elevated threat to life
and property;
reasonable chance of
combined storm
surge and tide
resulting in sea water
inundation of 1 – 3 ft.



IMPLEMENTING PROTECTIVE ACTIONS



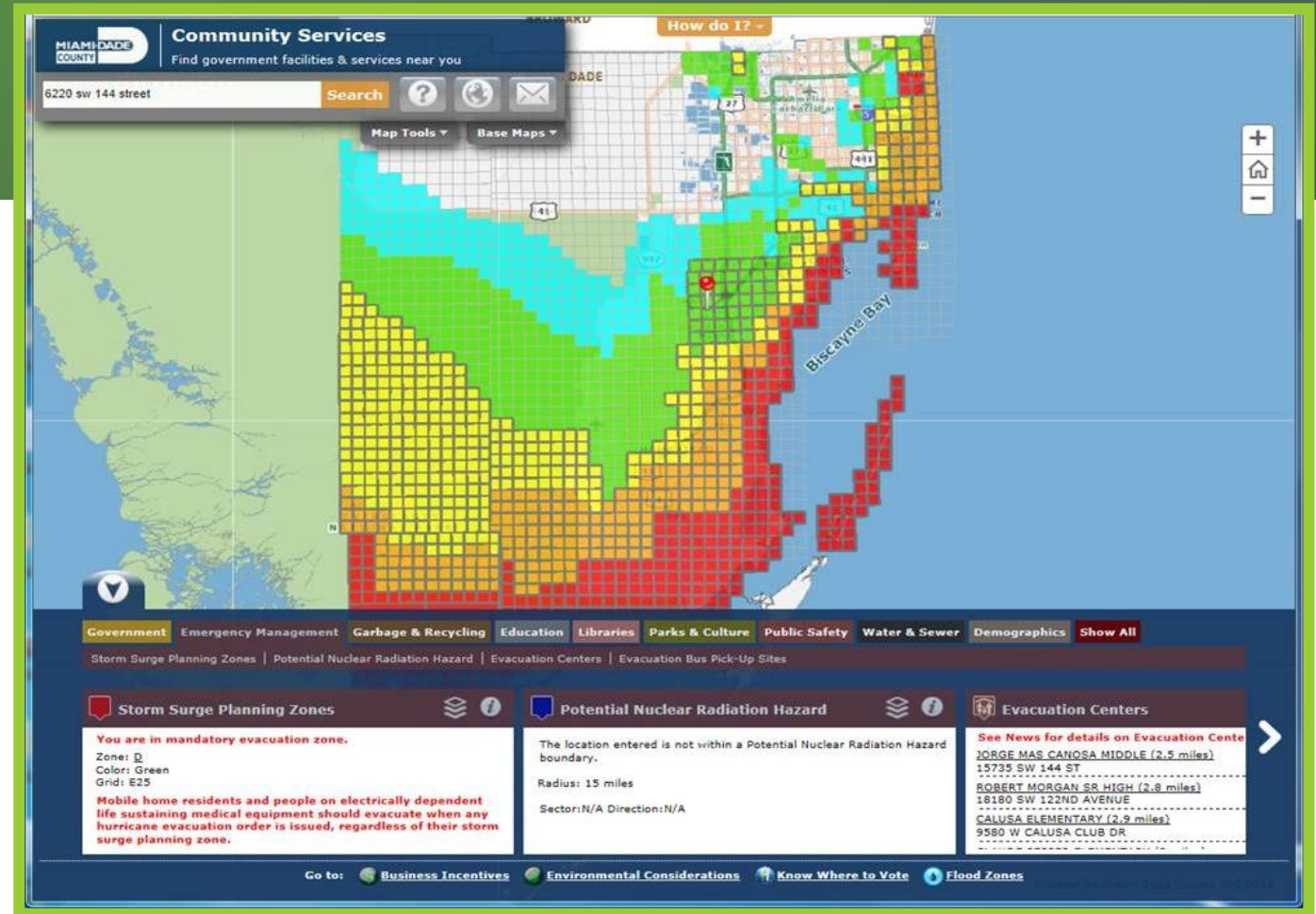
Evacuation Order

- If the decision is to evacuate then we must start the work of communicating with our agencies and positioning resources to open HECs, facilitate transportation (buses, STS, etc.), lift tolls and address impediments on the roadway.
- Communicate the evacuation order to the public via the press and emergency alerting.



AM I IN THE EVACUATION ORDER?

Residents can call 311 or view the evacuation order on our website



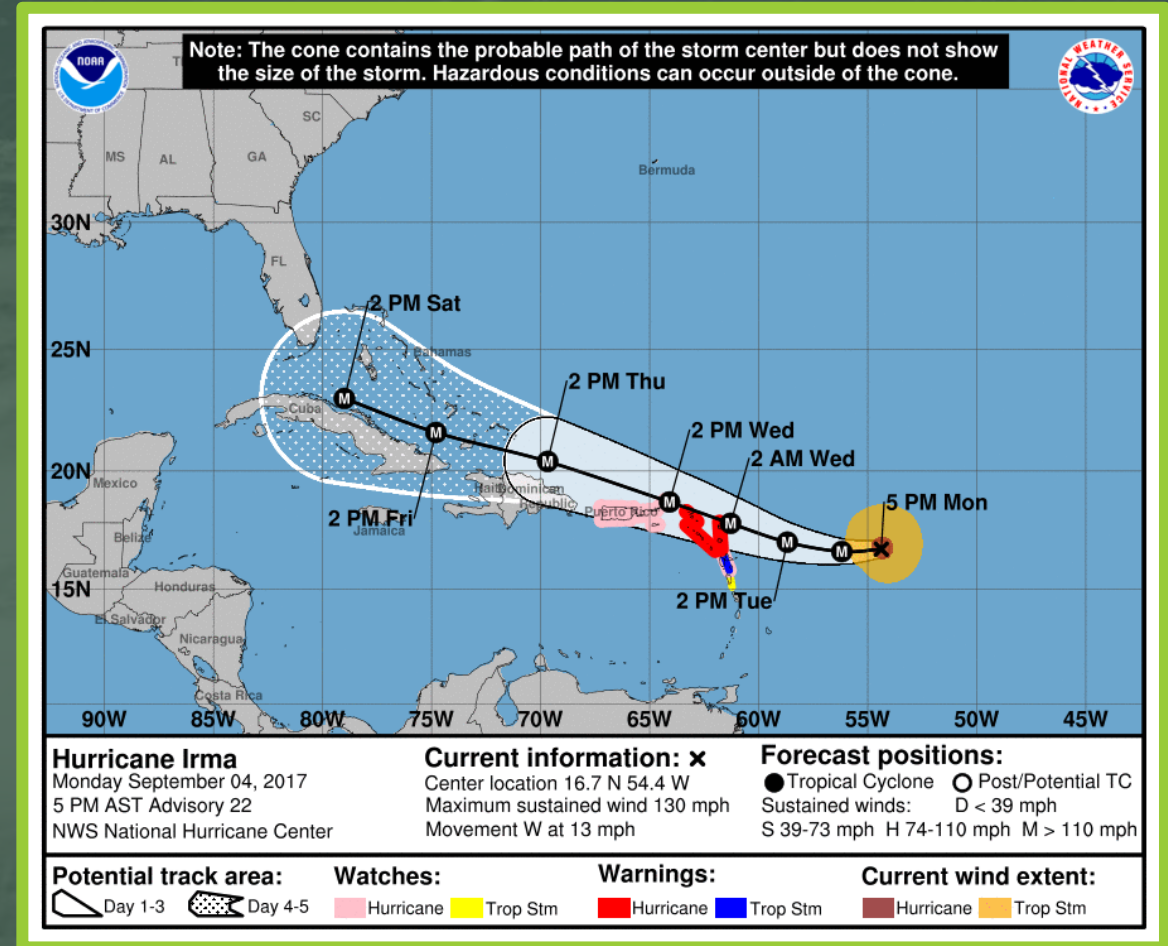
A satellite image of Hurricane Irma, showing a well-defined eye and a dense, swirling cloud structure. The hurricane is positioned over the Caribbean Sea, with the northern coast of South America visible in the upper left. The image is framed by a green border.

HURRICANE IRMA

HURRICANE IRMA



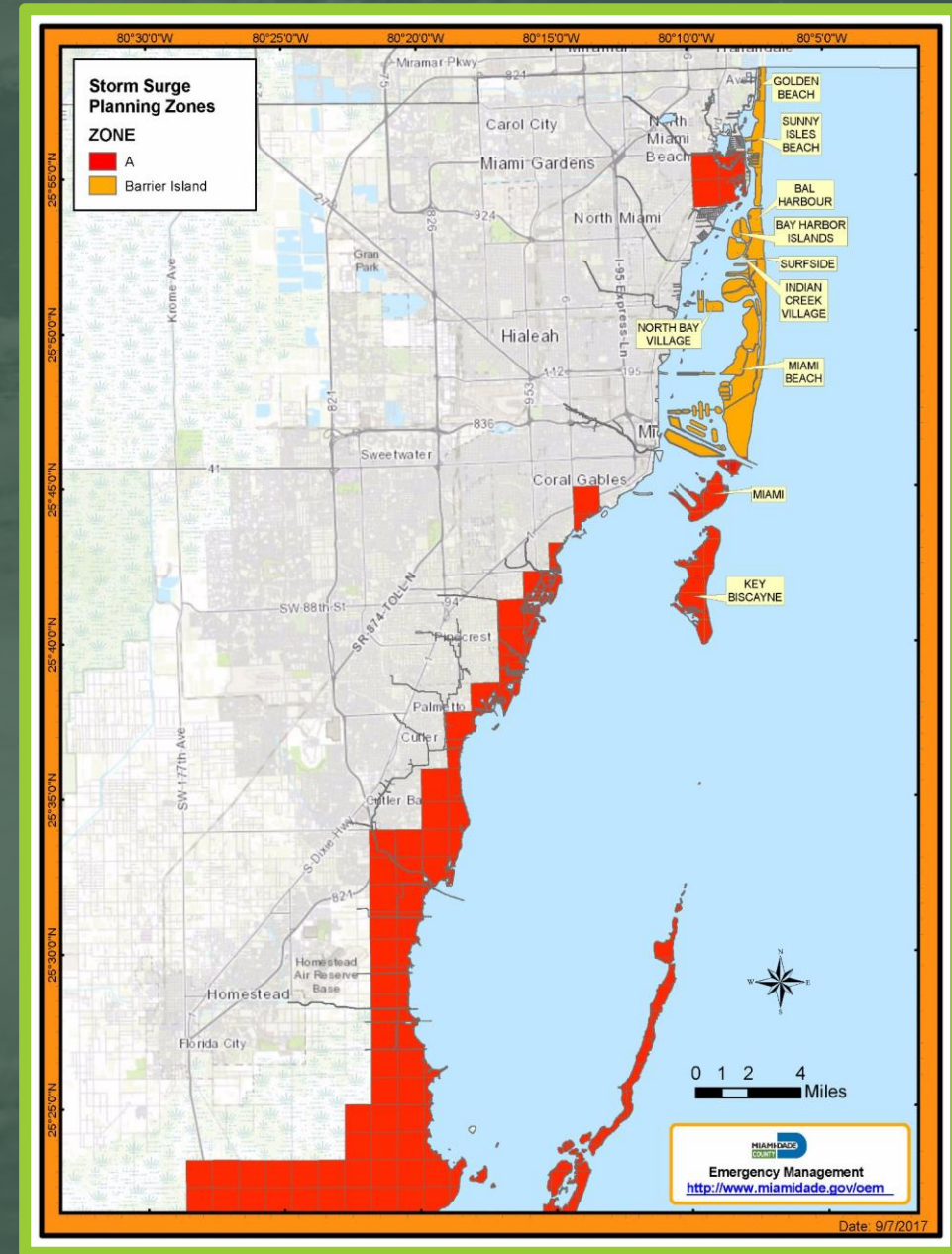
- On Monday, September 4, Miami-Dade County is within the 5-day forecast cone of Major Hurricane Irma
- The Miami-Dade Office of Emergency Management initiated preparatory actions
- Governor Scott issues Executive Order #17-235 declaring a state of emergency for all 67 Florida counties



HURRICANE IRMA



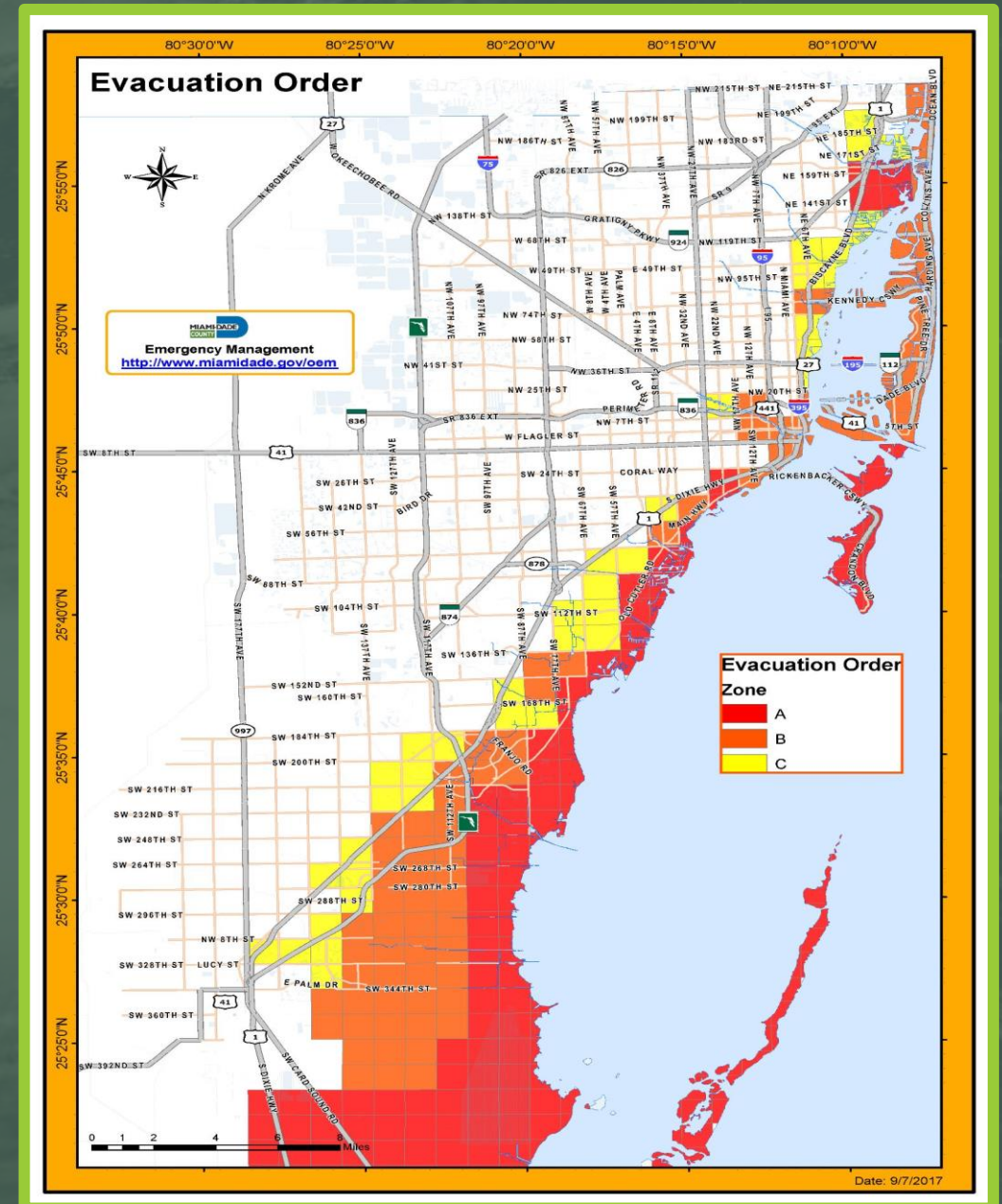
- On Wednesday September 6, the Miami-Dade EOC is activated to Level 1 (Full-Scale)
- Transportation of special needs clients has commenced
- 3 General population & 1 Pet Friendly Evacuation Center are opened
- That evening an evacuation order is issued for portions of Zone A and the Barrier Islands



HURRICANE IRMA



- On Thursday September 7, Hurricane Irma is a category 5 hurricane with maximum sustained winds of 185 mph it continues on a WNW track towards Miami-Dade County.
- A total of 1,717 evacuees and 14 pets are in 8 evacuation centers.
- The County Mayor expands the mandatory evacuation to include all of Zone A, all of Zone B and portions of Zone C.



HURRICANE IRMA

Human Services



- Feeding
 - Salvation Army – 14,648 meals
 - American Red Cross – 82,000 meals
 - United Way Miami/Miami-Dade VOAD – 5,895 meals
 - Feeding South Florida – 380,000 meals
 - Disaster Nutrition Assistance Program – provided at five locations between October 11th and 15th
- Blue Roof Program
- Disaster Survivor Assistance Team
- Disaster Recovery Centers



HURRICANE IRMA

Individual and Public Assistance



- Individual Assistance
 - 399,884 approved applications for a total \$447,235,536
- Small Business Administration
 - Loans approved = 6,079
 - Total Dollars approved \$223,890,000
- Public Assistance
 - 108 applicants within Miami-Dade County
 - 1,132 projects
 - Miami-Dade County government's requested \$308.7 million in reimbursement
 - Amount awarded to date \$29.6 million (05/03/19)

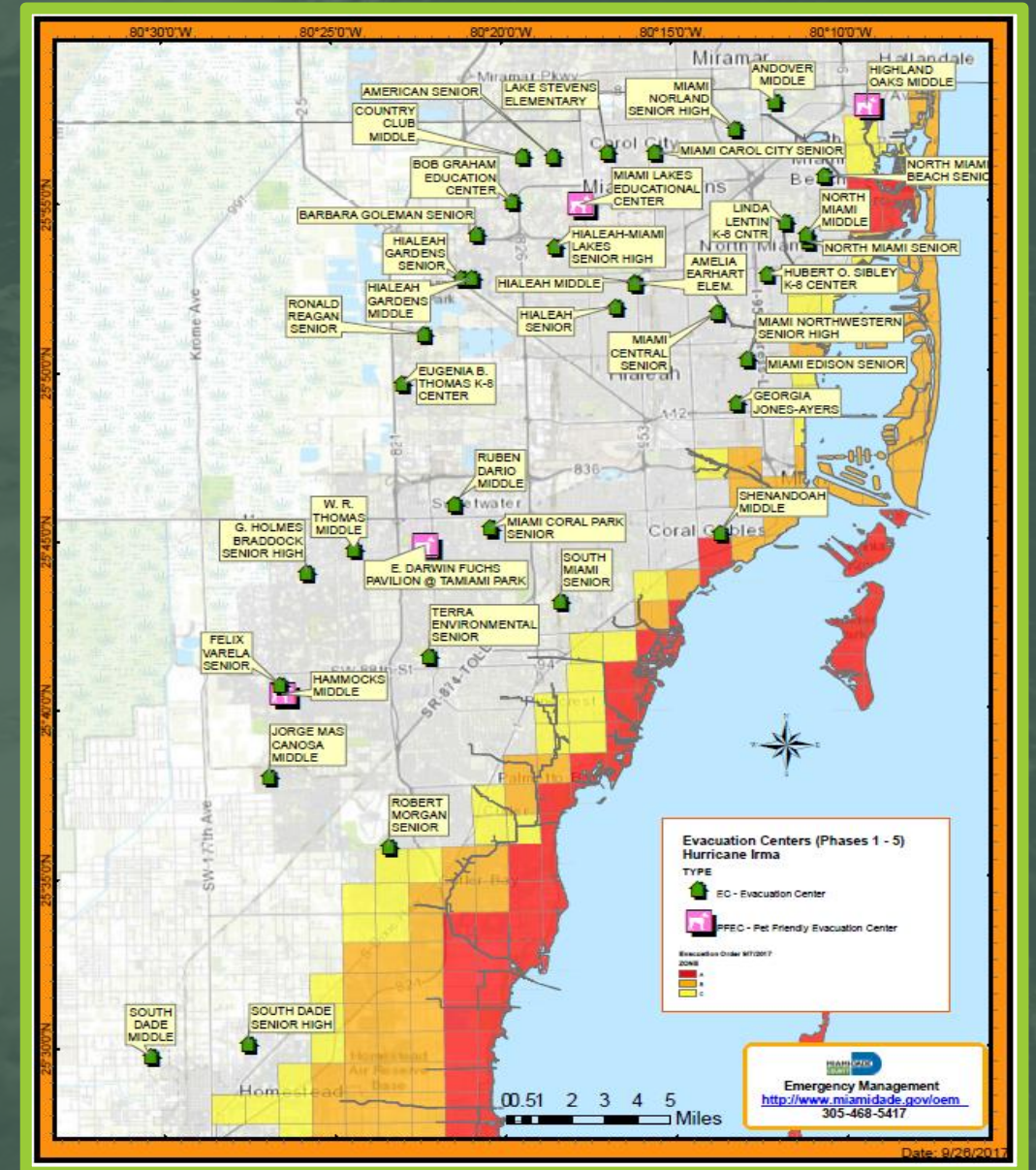


HURRICANE IRMA

Evacuation Centers



- 31,000 evacuees
- 43 Evacuation Centers opened
 - 38 General Population
 - 4 Pet Friendly Evacuation Centers
 - 1 Medical Evacuation Center
- 270 electrically dependent evacuees in 22 county hospitals



HURRICANE IRMA

Recovery



- The Small Business Administration has approved 6,079 disaster loans worth \$224 million for Miami-Dade County residents & businesses
- 779,355 residents have applied for FEMA Individual Assistance
- 108 applicants for FEMA Public Assistance within Miami-Dade County worth \$471,264,694.20
- Four million cubic yards of hurricane debris from the 320 square miles of county roads
- \$3.9 million in mitigation funding obligated to 32 projects

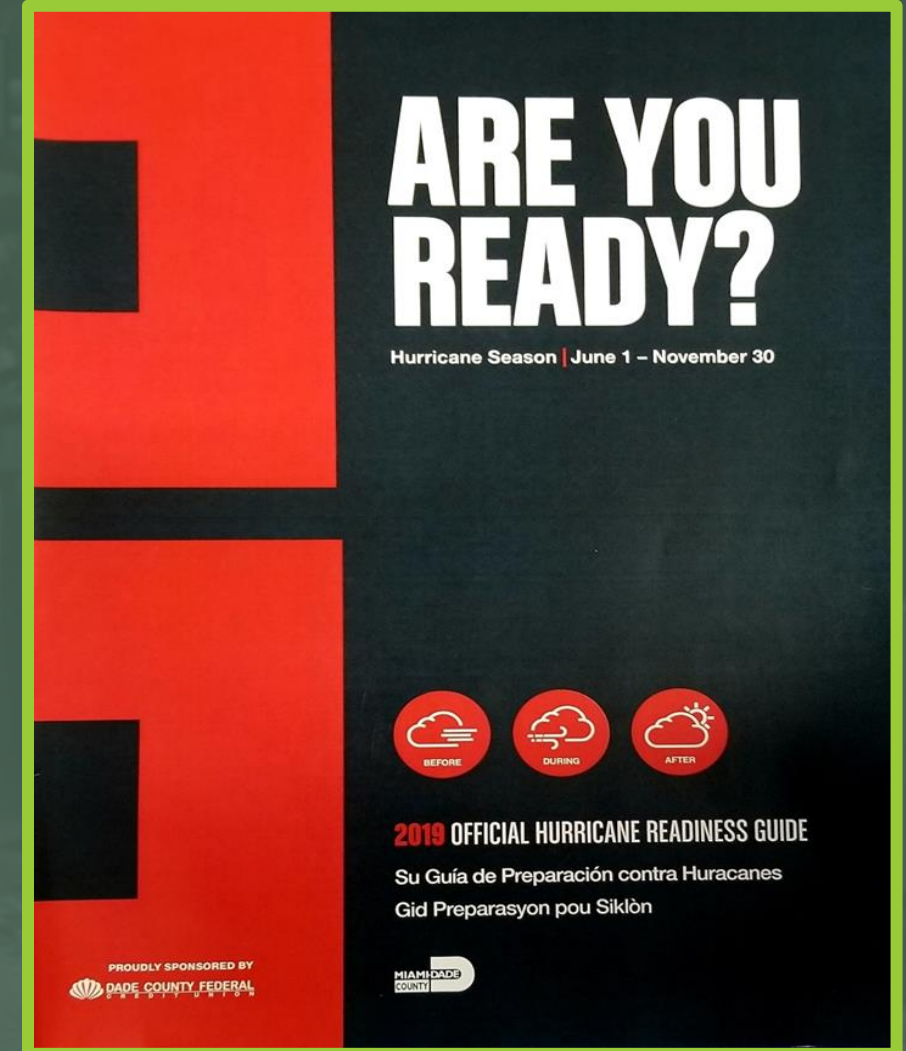


2019 MIAMI-DADE HURRICANE GUIDE

Contents include:



- County Mayor's Message
- County Commissioners' Contact Info
- Evacuation Information
- What to do Before, During & After a Storm
- Disaster Kit Checklist
- Safety Tips
- Door Hanger Program
- Storm Surge Planning Zones Map
- 311 Contact Center Information
- Preparation for Recovery
- Phone Numbers, Websites and Social Media



READY MIAMI-DADE APP

Contents include:

- Know Your Zone (evacuation zones)
- Evacuation Order
- Evacuation Bus Pick-up Points
- 311 Contact Center Direct info
- Evacuation Information
- What to do Before, During and After a Hurricane
- Safety Tips
- Phone Numbers, Websites and Social Media
- Hurricane Guide



THANK YOU



Charles Cyrille



ccyrille@miamidade.gov



(305) 468-5403

