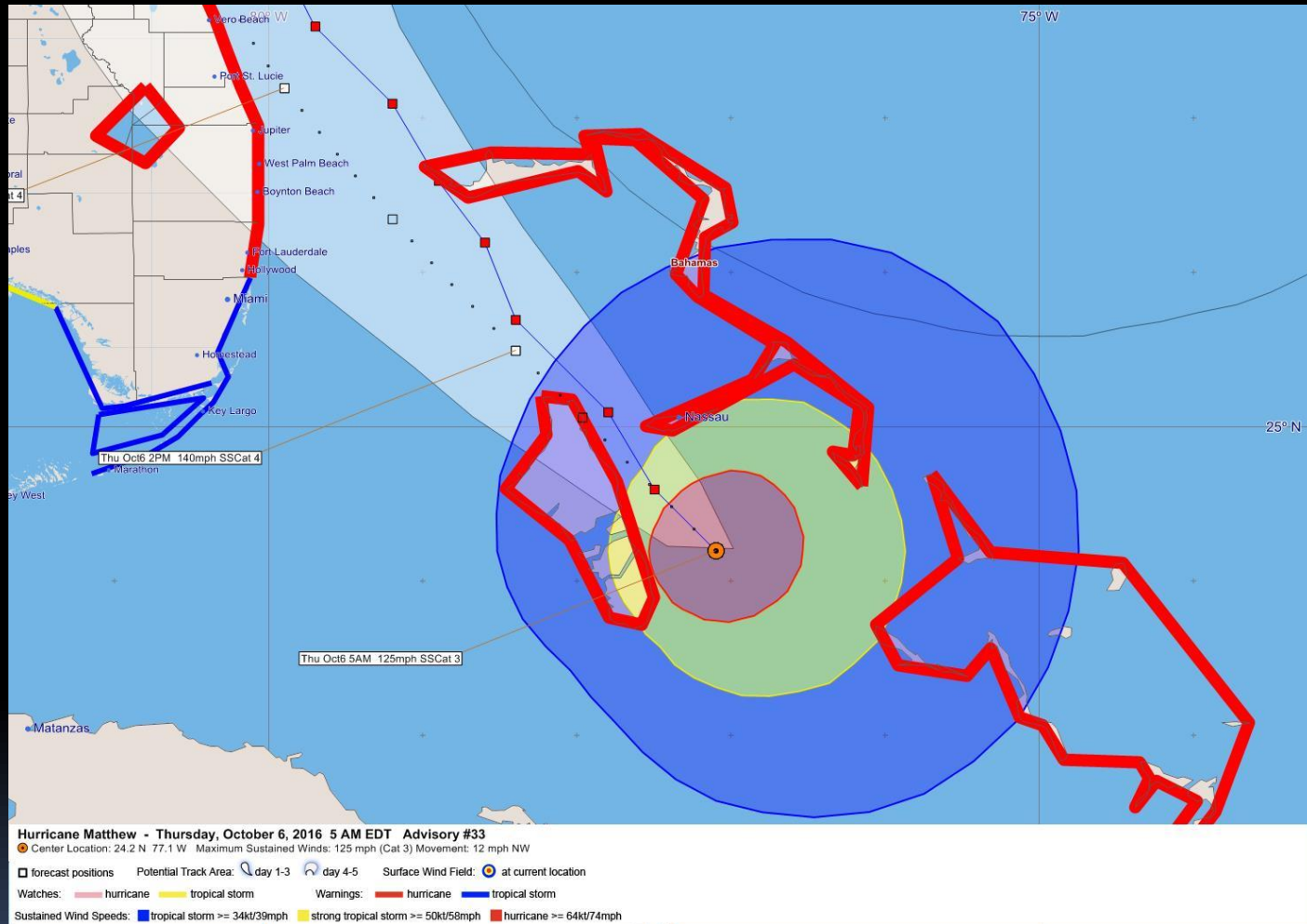



A HURRICANE IS COMING....



Presented by
Atiba Upchurch
Broward Emergency Management Division



Mission Statement

- **To safeguard the lives and property of the people of Broward County from major hazards and emergencies through effective leadership, coordination, and implementation of mitigation, preparedness, response, and recovery initiatives with private, governmental and community partners.**
- 

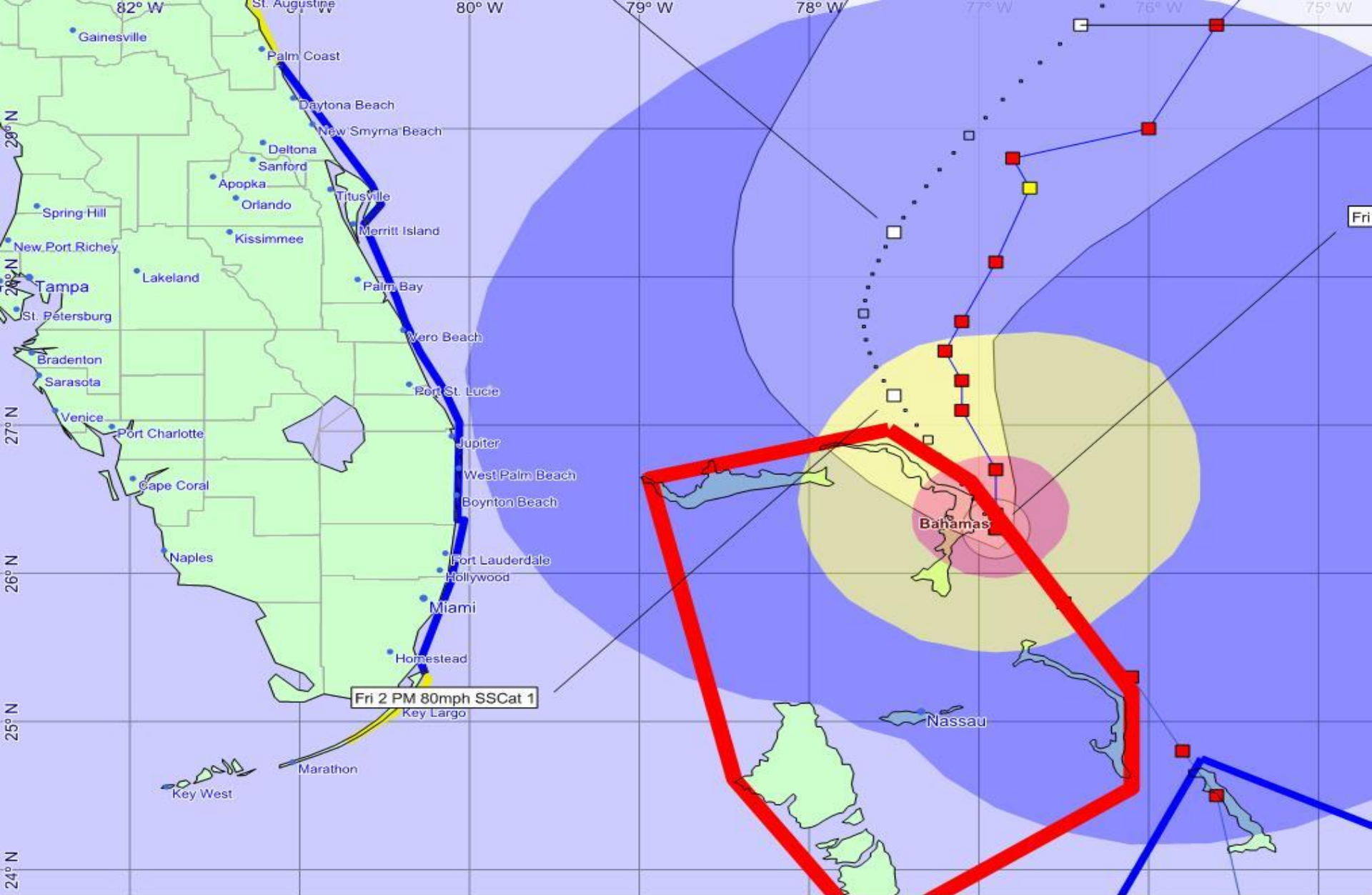
The Hazards of a Hurricane

1. Wind
2. Rainfall and Flooding
3. Storm Surge*
4. Tornadoes

We mainly only evacuate for storm surge

**kills more people than any other hurricane peril*

*Hurricane Katrina: 1,833 died mainly due to storm surge.
(NOAA)*



Fri 2 PM 80mph SSCat 1
Key Largo

Hurricane Sandy - Friday, October 26, 2012 5 AM EDT Advisory #16

Center Location: 26.3 N 76.9 E Maximum Sustained Winds: 80 mph (Cat 1) Movement: 13 mph NW

☐ forecast positions Potential Track Area: ☉ day 1-3 ☉ day 4-5 Wind Extents: ● at current location

Watches: ■ hurricane ■ tropical storm Warnings: ■ hurricane ■ tropical storm

Sustained Wind Speeds: ■ tropical storm >= 34kt/39mph ■ strong tropical storm >= 50kt/58mph ■ hurricane >= 64kt/74mph







Hurricane Matthew Event Timeline

- Saturday, Oct 1 – EOC to Level 3 (Monitoring & Assessment)
 - EMD Staff (*1st Flash Report issued)
- Tuesday, Oct 4, 11:00 AM – Broward County placed under Tropical Storm Watch
- Tuesday, Oct 4, 11:00 AM – Mayor signs Declaration of Local State of Emergency
- Tuesday, Oct 4, 12:00 PM – EOC to Level 2 (Partial Activation)
 - ESFs 5, 6, 8, 11, 14, applicable Section Chiefs, EMD Staff
- Tuesday, Oct 4, 5:00 PM – Broward County under Hurricane Watch
- Tuesday, Oct 4, 11:00 PM – Broward County under Hurricane Warning
- Wednesday, Oct 5, 12:00 PM – EOC recommended voluntary evacuations for mobile homes and low-lying areas



Broward County Emergency Operations Center **FLASH REPORT #01**

CONTACT INFORMATION:
Standard hours phone: 954.831.3900
Non-standard hours: 954.831.3911
FAX: 954.382.5805
ESF5@broward.org

| | | |
|--|--|--|
| 1. INCIDENT NAME <i>Hurricane Matthew</i> | 2. DATE October 1, 2016 | 3. TIME 1200 hours |
| 4. BROWARD EOC ACTIVATION LEVEL Level 3 – monitoring & assessment | 5. LOCAL STATE OF EMERGENCY DECLARED? None. | 6. PREPARED BY Broward EMD Duty Officer |

7. SUMMARY OF CURRENT SITUATION AND ACTIONS

As of 1100 AM Hurricane Matthew is a Category 4 hurricane with sustained winds of 145 mph. At this time, it is still too early to say exactly what, if any, impacts Matthew will have on Florida. Parts of the southeastern Florida Peninsula are now within the 5-day average error cone. Also, parts of South Florida now have a 10% to 20% chance of seeing tropical storm force winds sometime within the next five days. Any possible impacts remain 4-6 days away, but Matthew is a very large storm and it has the potential to generate occasionally gusty winds and rough seas along the East Coast of Florida, with minor coastal flooding and erosion. Any additional impacts are dependent on the future track of the storm, which remains uncertain at this time. Should the storm take a track to the west of the error cone, there remains the possibility of hurricane force winds affecting South Florida. BEMD is closely monitoring this storm and will keep BERT members advised should we need to initiate any conference calls. An incident, **Matthew 2016**, has been created in [WebEOC](#).

IMPORTANT NOTE: The following table identifies our *tentative* schedule based on the current NHC advisory. These estimated dates and times have not been confirmed and are likely to change based on the next NHC advisory. *These dates and times are to be used merely as a planning guideline.* The information contained in this advisory is to inform public safety agencies and is *NOT* intended for general, public, or media distribution. Please do not distribute this information to the general public or the media – the general public may be referred to the Broward Call Center at 954.831.4000.

| | |
|---|----------------|
| Broward County EOC activated to Level 3 (monitoring & assessment) | |
| BERT conference call | None Scheduled |
| Municipal EOC conference call | None Scheduled |

8. INCIDENT GRAPHICS AND ADVISORY

Note: The cone contains the probable path of the storm center but does not show the size of the storm. Hazardous conditions can occur outside of the cone.

At 1100 AM EDT (1500 UTC), the eye of Hurricane Matthew was located near latitude 13.4 North, longitude 73.4 West. Matthew is moving toward the west near 6 mph (9 km/h). A turn toward the west-northwest is forecast later today, followed by a turn toward the north-northwest on Sunday and toward the north on Monday. On the forecast track, the center of Matthew will move across the central Caribbean Sea today and Sunday, and approach Jamaica and southwestern Haiti Sunday night and Monday.

Data from an Air Force Reserve Hurricane Hunter aircraft indicate that maximum sustained winds are near 145 mph (230 km/h) with higher gusts. Matthew is a category 4 hurricane on the Saffir-Simpson Hurricane Wind Scale. Some fluctuations in intensity are possible this weekend, but Matthew is expected to remain a powerful hurricane through Monday.

Hurricane-force winds extend outward up to 30 miles (45 km) from the center and tropical-storm-force winds extend outward up to 205 miles (335 km).


The latest minimum central pressure measured by the aircraft was 947 mb (27.97 inches).

| | | |
|--|---|--|
| Hurricane Matthew Saturday October 1, 2016 11 AM EDT Advisory #4 NWS National Hurricane Center | Current Information: Center Location 13.4N 73.4W Max Sustained Wind 145 mph Movement W at 6 mph | Forecast Positions: ● Tropical Cyclone ○ Post-Tropical Sustained Winds: D < 39 mph S 39-73 mph H 74-110 mph M > 110mph |
| Potential Track Area: Day 1-3 Day 4-5 | Watches: Hurricane Trop. Storm | Warnings: Hurricane Trop. Storm |

| | | |
|------------------------------------|-----------------------------|---|
| 9. APPROVED BY Miguel Ascarrunz | 10. TITLE Director, BEMD | 11. DATE/TIME October 1, 2016/1200 hours |
|------------------------------------|-----------------------------|---|

Hurricane Matthew Event Timeline

- Wednesday, Oct 5, 3:00 PM – EOC continue at Level 2
 - ESFs 1, 5, 6, 8, 14, 16, applicable Section Chiefs, Branch Directors, EMD Staff
- Wednesday, Oct 5, ~9:00 PM – Opened 10 shelters
 - 7 General Population, 1 Pet Friendly, 1 Adult Special Needs, 1 Pediatric Special Needs
- **Thursday, October 6, 7:00 AM – EOC to Level 1 (Full Activation)**
- Thursday, October 6, ~3:00 PM – Tropical Storm winds begin in County
- Thursday, October 6, 8:00 PM – Broward County advisory lowered to Tropical Storm Warning
- Thursday, Oct 6, 11:00 PM – EOC to Level 2
 - ESFs 1, 6, 8, 14, 16, 17, Call Center, EMD Staff
- Friday, Oct 7, 5:00 AM – Tropical Storm Warning Cancelled
- **Friday, Oct 7, 1:00 PM – EOC to normal operating condition (Monitoring)**



Countywide Information Gathering Before the Storm

Components with Decision Making



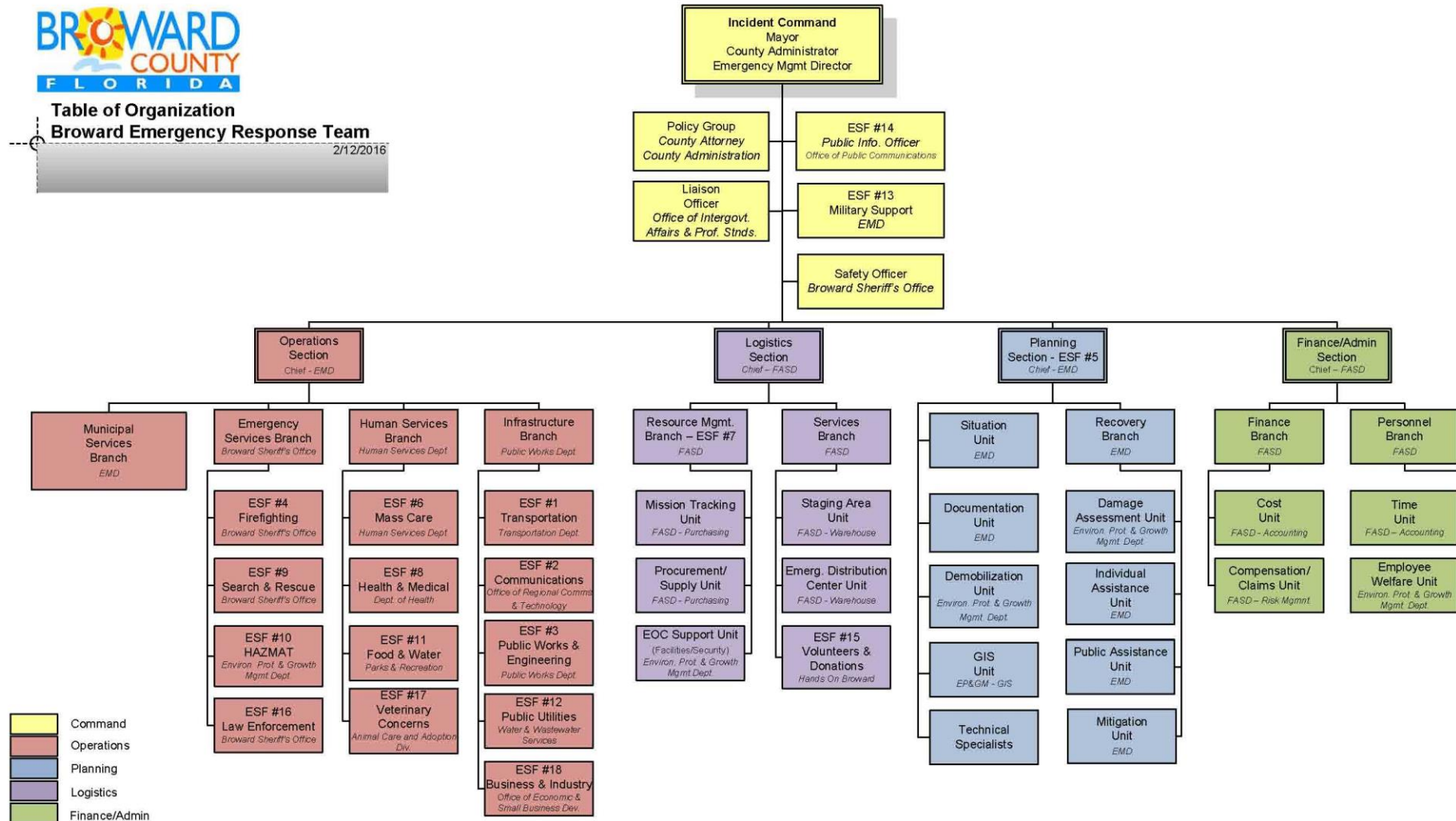
- Table of Organization
- WebEOC
- SALT
- Damage Assessment

Table of Organization

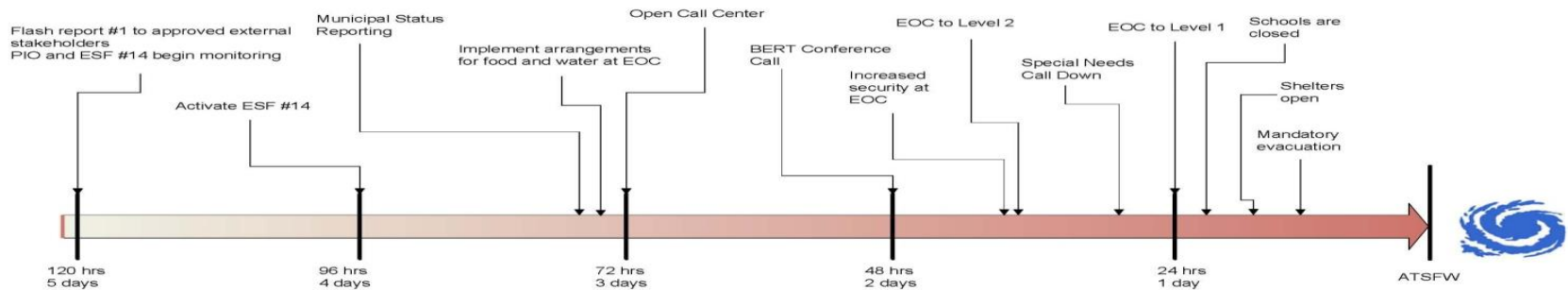


Table of Organization Broward Emergency Response Team

2/12/2016



Storm Action Lead Time (SALT)



Welcome, ESF5 (Logout). You are logged in as BC Planning Damage Assessm in Erika 2015



File Library x Municipal EEL x EOC Timeline x **SALT** x



Storm Action Lead Time

Last calculated on: Never

Tasks Print

Storm Name:
 Arrival of TSWF:
 Evacuation Zone:

NHC ADV Num:
 Time of ADV:
 Storm Heading:

Forward Speed:
 Max. Sust. Wind:
 Storm Diameter:

Calculate S.A.L.T.

Saved.

Types of Hurricanes

| <u>Category</u> | <u>Wind Speed</u> | <u>Storm Surge*</u> |
|-----------------|--------------------|---------------------|
| 1 | 74-95 mph | 4-5 feet |
| 2 | 96-110 mph | 6-8 feet |
| 3 | 111-130 mph | 9-12 feet |
| 4 | 131-156 mph | 13-18 feet |
| 5 | 157 + mph | Over 18 feet |

**Storm surge depth also depends upon the steepness or shallowness of the ocean or Gulf shelf; the Atlantic and Gulf coasts are generally shallow compared to other U.S. shorelines.*

Mandatory Evacuation Plans

PLAN A

– Typically a Category 1-2 hurricane:

All residents in the area east of the
Intracoastal Waterway

PLAN B

– Typically a Category 3, 4 or 5 hurricane:

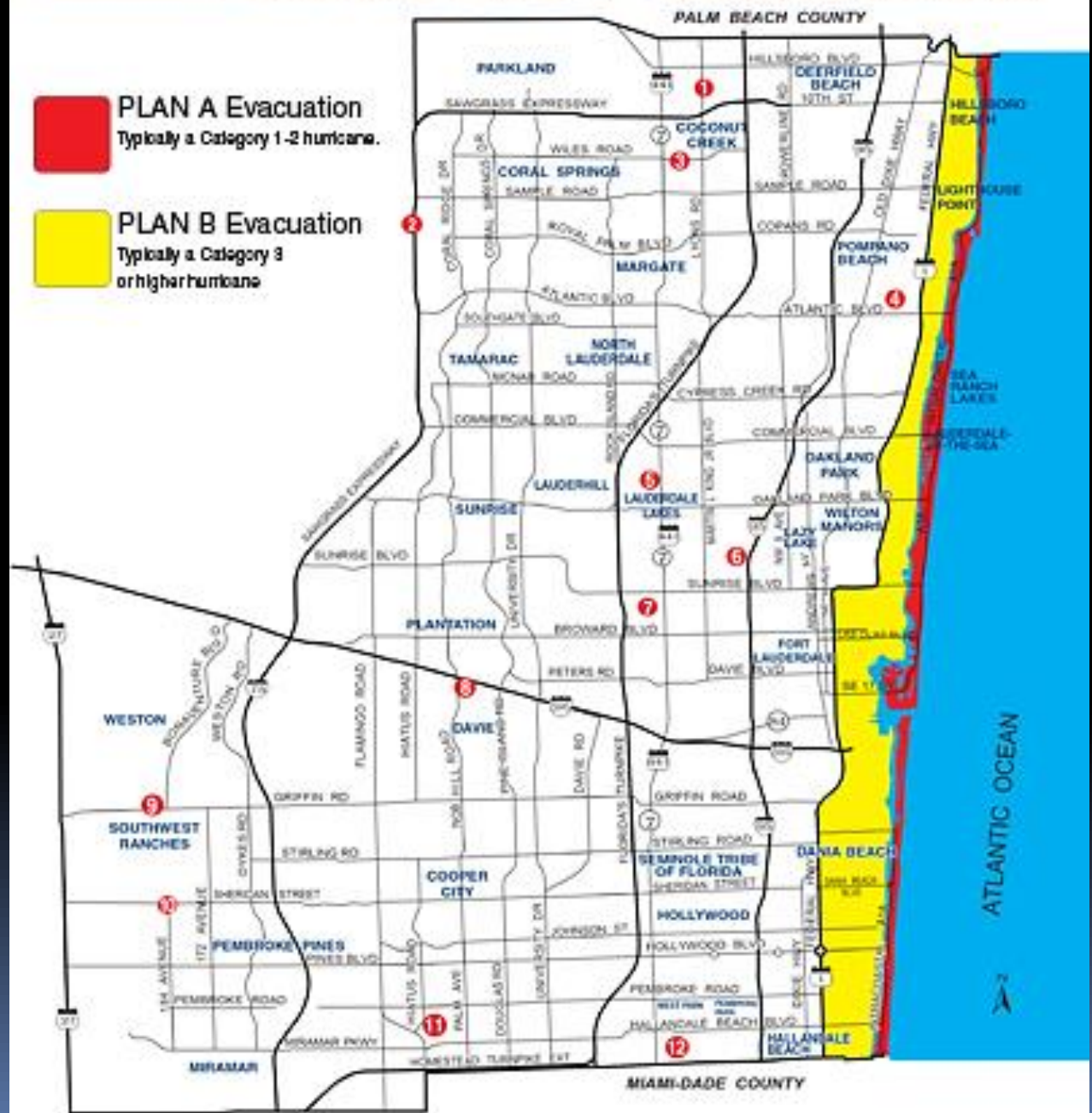
All residents in the area east of U.S. 1

And.....

EMERGENCY SHELTER MAP

- PLAN A Evacuation**
Typically a Category 1-2 hurricane.

- PLAN B Evacuation**
Typically a Category 3 or higher hurricane



ATLANTIC OCEAN



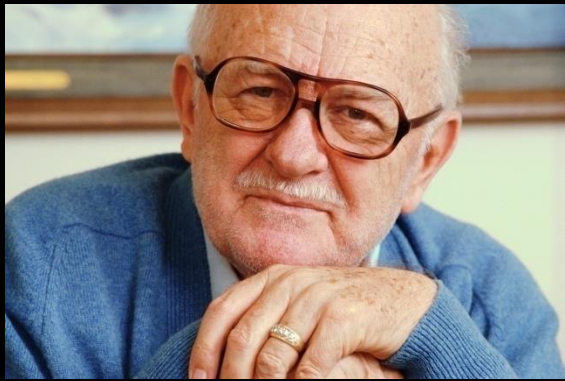
Special Medical Needs shelters are appropriate for someone who:

- Has minor health/medical conditions that require professional observation, assessment, and maintenance
- Requires assistance with personal care and/or assistance with medications but does not require hospitalization or a medical institution
- *All residents seeking shelter in a Special medical needs facility will be reviewed on an individual basis to determine the best placement for their needs.*

Vulnerable Population Registry

*...a joint partnership between Broward County
and its municipalities*

www.broward.org/atrisk



Who is it for?

- People who would be at risk after a storm, especially those with a disability, frailty or health issue.
- Does not guarantee that you will be provided services or placed on a priority list.
- First responders use this database to prioritize initial response.
- Register online at www.broward.org/atrisk or by calling the Broward County Call Center at (954) 831-4000 or 311

General Information

Situation Report # 8

Published Date/Time: 05/20/2015 07:12:07

Situational Report Period: 05/19/2015 19:00:00 to 05/20/2015 07:00:00

Prepared By: Calvin Williams, PSC

EOC Activation Level: 1

Incident Image:



Weather Outlook

Weather Forecast

Locally we are at 76 degrees with winds out of the NW at 20 mph and overcast skies. The NWS has placed Broward County under Severe Thunderstorm and Flooding Warnings. More rain is forecast over the next 24 hours up to 6". Gibson is currently located 50 miles east of the South Georgia coast. It is a Category 1 hurricane on the Saffir-Simpson Hurricane Wind Scale, with maximum sustained winds of 75 mph (65 kts), moving north-northeast at 17 mph. The estimated minimum central pressure is 974 mb. Hurricane-force winds extend outward up to 30 miles (45 km) from the storm center. Tropical storm-force winds extend outward up to 230 miles (370 km) from the storm center.

Summary of Current Situation and Actions

Current Situation

As of today, Wednesday, May 20, at 08:30 a.m., we are 37 hours post landfall of the hurricane. Our Rapid Initial Assessments (RIA) for damages has been initiated and the initial reports are that many of the County areas hardest hit are those which also experienced tornado damage (Hollywood-Davie, Pompano-Coral Springs and Lauderdale). All areas of the county however are reporting moderate to severe damages.

There is major flooding, wind and storm surge damages evident throughout the county.

90% of County roads remain either cluttered or blocked due to debris.

Approximately 10% of the county's bridges are inoperable, primarily in the coastal communities and barrier islands.

Upwards of 80% of the County is without power.

County residents are not being allowed out into the streets unless they are employees of hospitals or are other First Responder agencies as many areas still have downed power lines in roads and over pedestrian travel points.

The EOC continues to receive damage assessments from first responders, Public Works and other sources.

At this point life-safety issues continue to be the highest priority.



Impacts after the storm





NOAA

Local State of
Emergency

State Emergency Declaration

Local, State, Federal

Presidential
Disaster
Declaration

Joint
Preliminary
Damage
Assessment

Local

Initial Damage
Assessment

American Red
Cross PDA

Impact
Assessment



Public Assistance

Individual Assistance



Response

Recovery

Reconstruction

Disaster



Home Damage Assessment Program

http://www.broward.org/hurricane/Pages/Default.aspx

Convert Select

Favorites Web Slice Gallery Yellow Pages Local Direct... Office Online Home Page Microsoft Office Microsoft Corporation Google Free Hotmail fema The National Flood I...

Hurricane

Microsoft Translator | Google Translate

BROWARD COUNTY FLORIDA

Home County Commission Living in Broward Doing Business Visiting Search

Broward County > Hurricane Printer Friendly

Hurricane



Evacuation & Shelter Information

Tracking the Storm

A-Z Hurricane Guide

Hurricane Kit Shopping Guide

Emergency Volunteer Opportunities

Links

Emergency Management Division

Broward County - Hurricane Preparedness

In the News

Residents Encouraged To Get Connected!

To stay informed, residents are encouraged to register now for the Broward County Hurricane Update eMail. To receive updates on your cell phone or email, follow us on Twitter. To become a follower, visit twitter.com/ReadyBroward. For more information on hurricane preparedness, call the Broward County Call Center at 954-831-4000 or 311.

New Registration for Special Medical Needs Shelters

There is a change in medical provider at the Special Medical Needs Shelters. New applications are required for the 2010 Hurricane Season. [More...](#)



Residents Wanted to Participate in Home Damage Assessment Program

Broward County is introducing a new program to help quickly identify areas of devastation, even before damage assessment teams are able to canvass the County. It's easy and a great service to the community. [Learn how you can participate...](#)



FOLLOW ReadyBroward



Subscribe to Hurricane Updates



Home Damage Assessment Program



Generator-Ready Businesses



Vulnerable Resident Preparedness

Resources

- A to Z Hurricane Guide
- The Official Broward County Hurricane Preparedness Guide



READY. SET. SAFE.



The Official Broward County Hurricane Preparedness Guide is filled with useful information, maps, telephone numbers and web site addresses that help you be ready - set - safe for hurricane.

Report Your Damage

- Three methods:

Internet

Cell Phone

Emergency Hotline

Data Entry Screen



Neighborhood Damage Assessment

1 Report the Address

House Number: Direction: Street Name: Street Type:

City: State: ZIP:

2 Select the Damage/Flood Level

1  **2**  **3**  **4** 

NO/MINOR DAMAGE HABITABLE MAJOR DAMAGE HABITABLE MAJOR DAMAGE UNINHABITABLE DESTROYED

Damage Level: Flood Level:

[Terms of Use](#) • [Contact Us](#)

What the pictures say.



With tarps, you may be able to stay in your home.



Long-term housing is needed.

Need long-term housing.

Rapid Impact Assessment - WIND

Find address or place

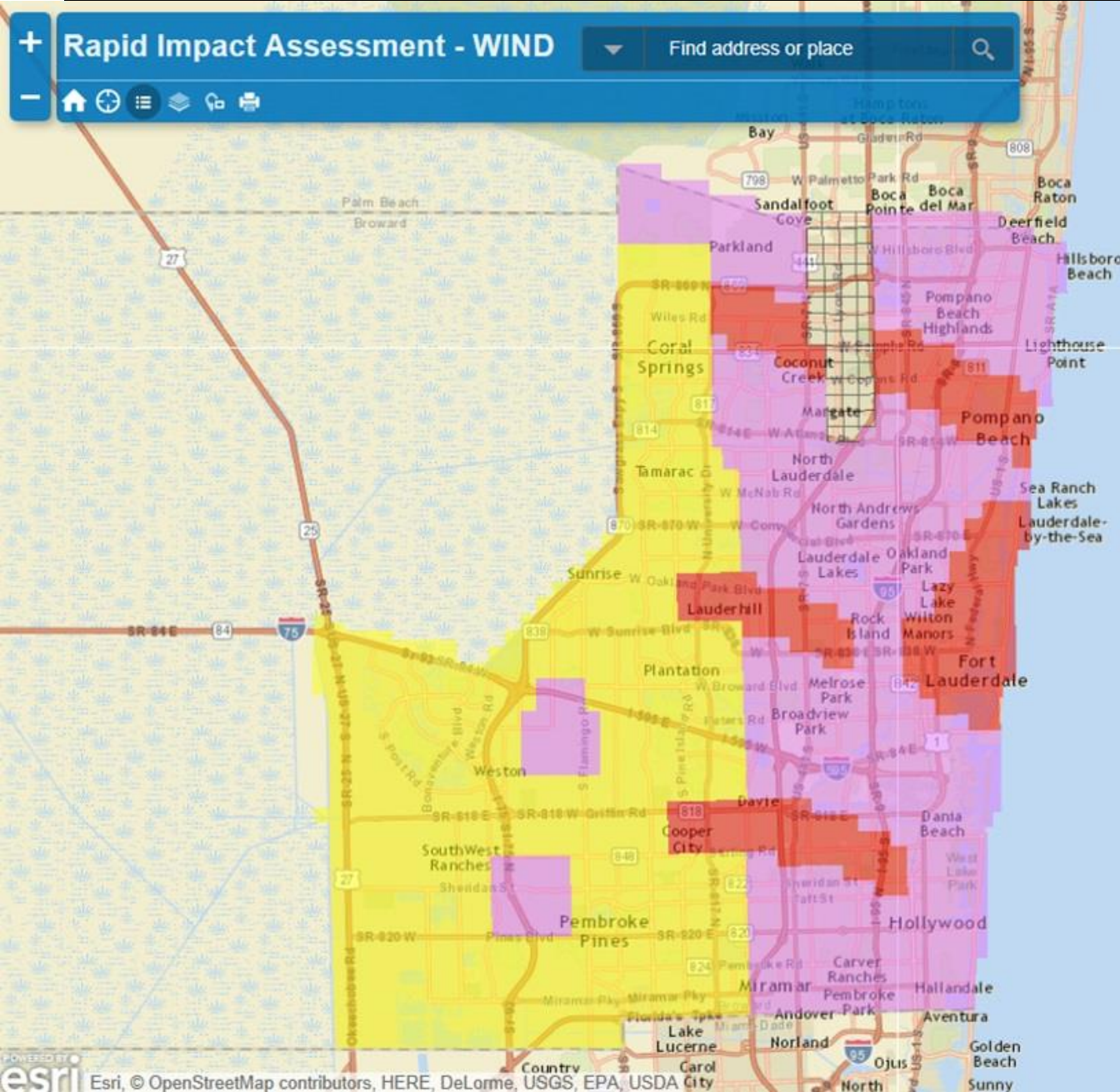


Legend

Damage Level:

Wind

- 4 Catastrophic
- 3 Severe
- 2 Moderate
- 1 Minor
- 0 No Damage
- No Report



Rapid Impact Assessment - FLOOD

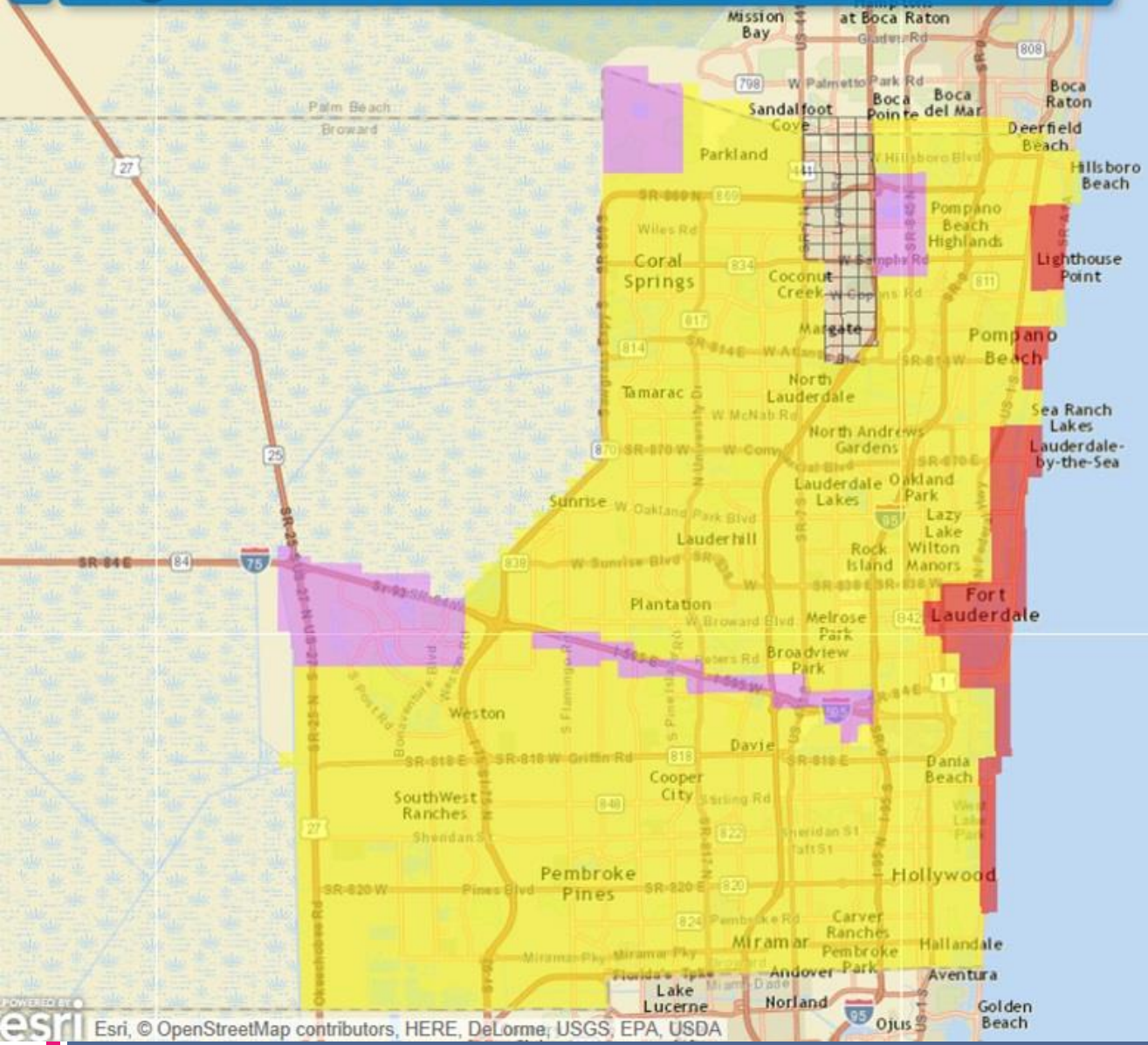
Find address or place



Legend

Damage Level:

- Flood
- 4 Catastrophic
- 3 Severe
- 2 Moderate
- 1 Minor
- 0 No Damage
- No Report



Prototype Storm Surge Watch/Warning Graphic*

Hurricane MATTHEW

Advisory 034 Issued: 11:00 AM EDT Thu Oct 6



0 50 100mi

Prototype Storm Surge Warning
Prototype Storm Surge Watch

Esri, HERE, Esri, HERE, DeLorme, NGA, USGS, NPS



Broward Emergency Management Division

www.broward.org/emergency

www.broward.org/hurricane

Florida Division of Emergency Management

www.floridadisaster.org

FEMA

www.fema.gov

READY (Ready America/Ready Business)

www.ready.gov

Twitter - [@readybroward](https://twitter.com/readybroward)

Facebook – [Broward County Emergency Management](https://www.facebook.com/BrowardCountyEmergencyManagement)





Questions?