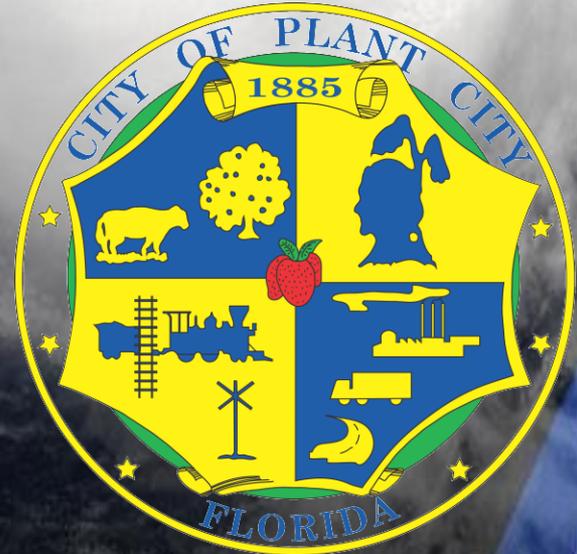
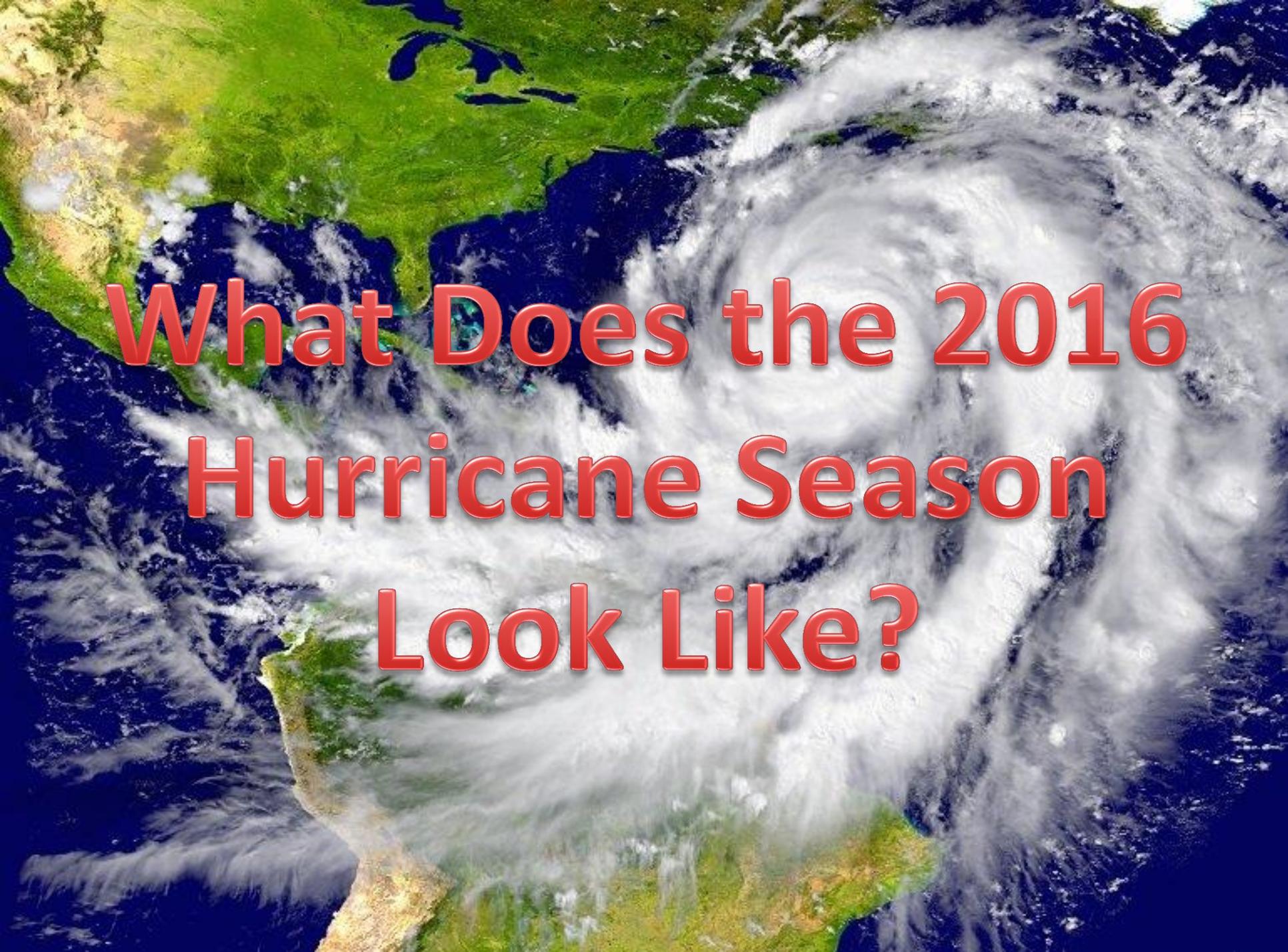


HURRICANE SEASON 2016



A satellite image of Earth showing a large, well-defined hurricane over the Atlantic Ocean. The hurricane has a clear eye and a dense, swirling cloud structure. The surrounding ocean is dark blue, and the landmasses of North and South America are visible in shades of green and brown. The text is overlaid in the center of the image.

**What Does the 2016
Hurricane Season
Look Like?**

HURRICANE SEASON FORECAST

2016

	AVERAGE	COLORADO STATE UNIV.
TOTAL NAMED	12	12
HURRICANES	6	5
CATEGORY 3 OR HIGHER	3	2





2016 – 2017 Predictions

Atlantic Hurricane Seasons
Global Weather Oscillations Inc. (GWO)

Named Tropical Cyclones - Hurricanes and Tropical Storms

	<u>Named Storms</u>	<u>Hurricanes</u>	<u>Major Cat. 3-5</u>	<u>Season Strength AHI Index</u>	<u>Landfalls U.S. Hurricanes</u>
<u>Average Season</u>	12	6	2.5	8 – 10	1.8
2013 Season	13	2	0	2	0
2014 Season	8	6	2	8	1
2015 Season	11	4	2	6	0
2016 Prediction by GWO	17	9	4	13	3 Hurricanes
2017 Prediction by GWO	17	9	5	14	4 Hurricanes

*2016 and 2017 - Enhanced Climate Pulse Hurricane Cycle

Definitions: Season Strength

Below Average Season:	5 or less hurricanes with 2 or less major hurricanes	AHI cumulative index of both = 7 or less
Average Season:	6 to 9 hurricanes with 1 to 3 major hurricanes	AHI cumulative index of both = 8 to 10
Above Average Season:	7 to 10 hurricanes with 3 to 5 major hurricanes	AHI cumulative index of both = 11 to 14)
Hyper Strong Season:	9 to 15 hurricanes with 5 or more major hurricane	AHI cumulative index of both = 15 or more

Prediction Comparisons

Atlantic Hurricane Season Strengths

2009 - 2014

Years	2009	2010	2011	2012	2013	2014
Hurricane (total)	3	11	6	10	2	6
Hurricanes (major)	2	5	3	1	0	2
*Season Strength	Weak	Strong	Strong	Moderate	Weak	Normal

determined by (**AHI and ACE Indexes)

Predictions by Organization	Years Incorrect (X) - Years Correct (✓)						Years Correct
	2009	2010	2011	2012	2013	2014	
Global Weather Oscillations	✓	✓	✓	✓	✓	✓	6
Colorado State Univ.	X	✓	✓	X	X	X	2
Impact Weather						X	2
Aon Benfield	X	✓	✓	X	X	X	2
TWC/WSI	X	✓	✓	X	X	X	2
NOAA/NHC	X	✓	✓	X	X	X	2
TSR – Tropical Storm Risk	X	✓	✓	X	X	X	2
North Carolina State Univ.		✓	✓	X	X	X	2
ACCU Weather	X	✓	✓	X	X	X	2

*ACE (accumulated cyclone energy by the National Oceanic and Atmospheric Administration - NOAA)

**AHI (accumulated hurricane index by Global Weather Oscillations Inc. - GWO)

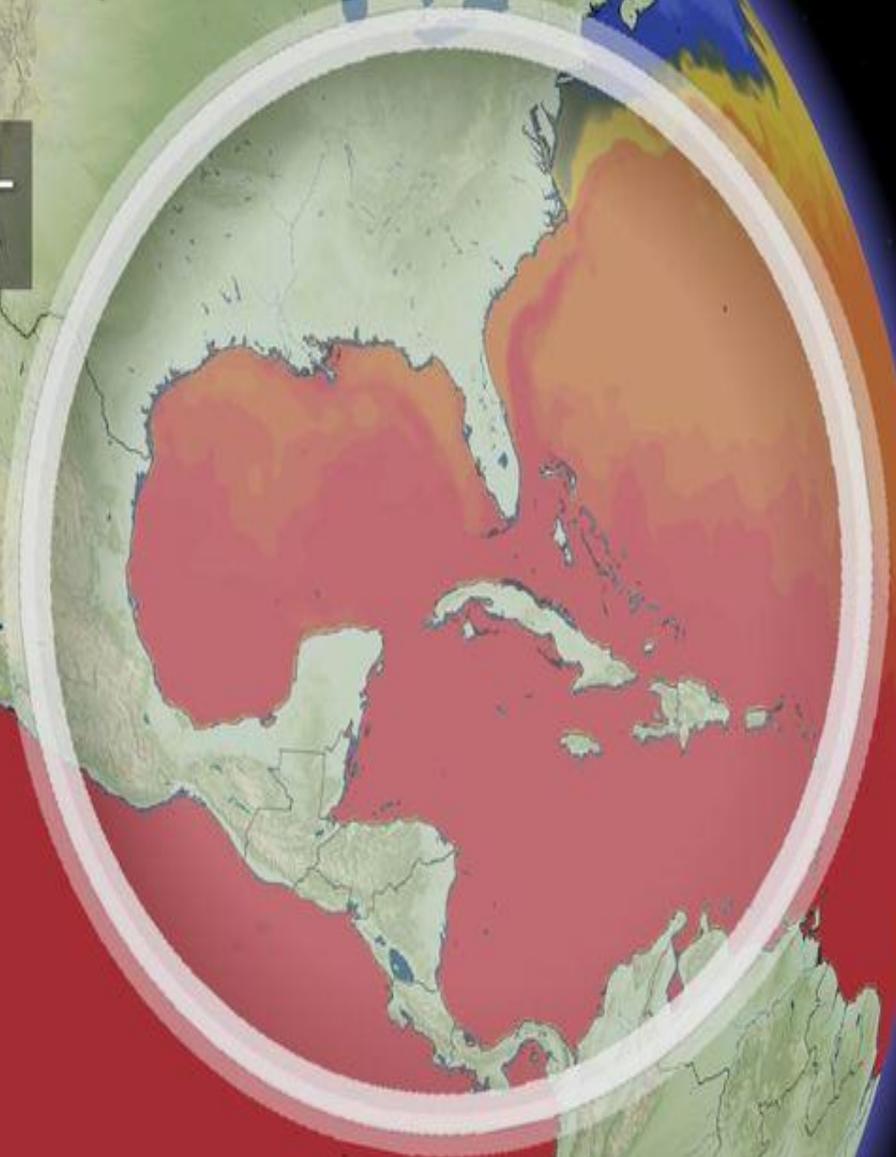
AHI Index: **Below Normal-Weak** (less than 8) **Normal** (9-10) **Above Normal** (11 to 14) **Hyper** (15 and above)



The Weather
Network

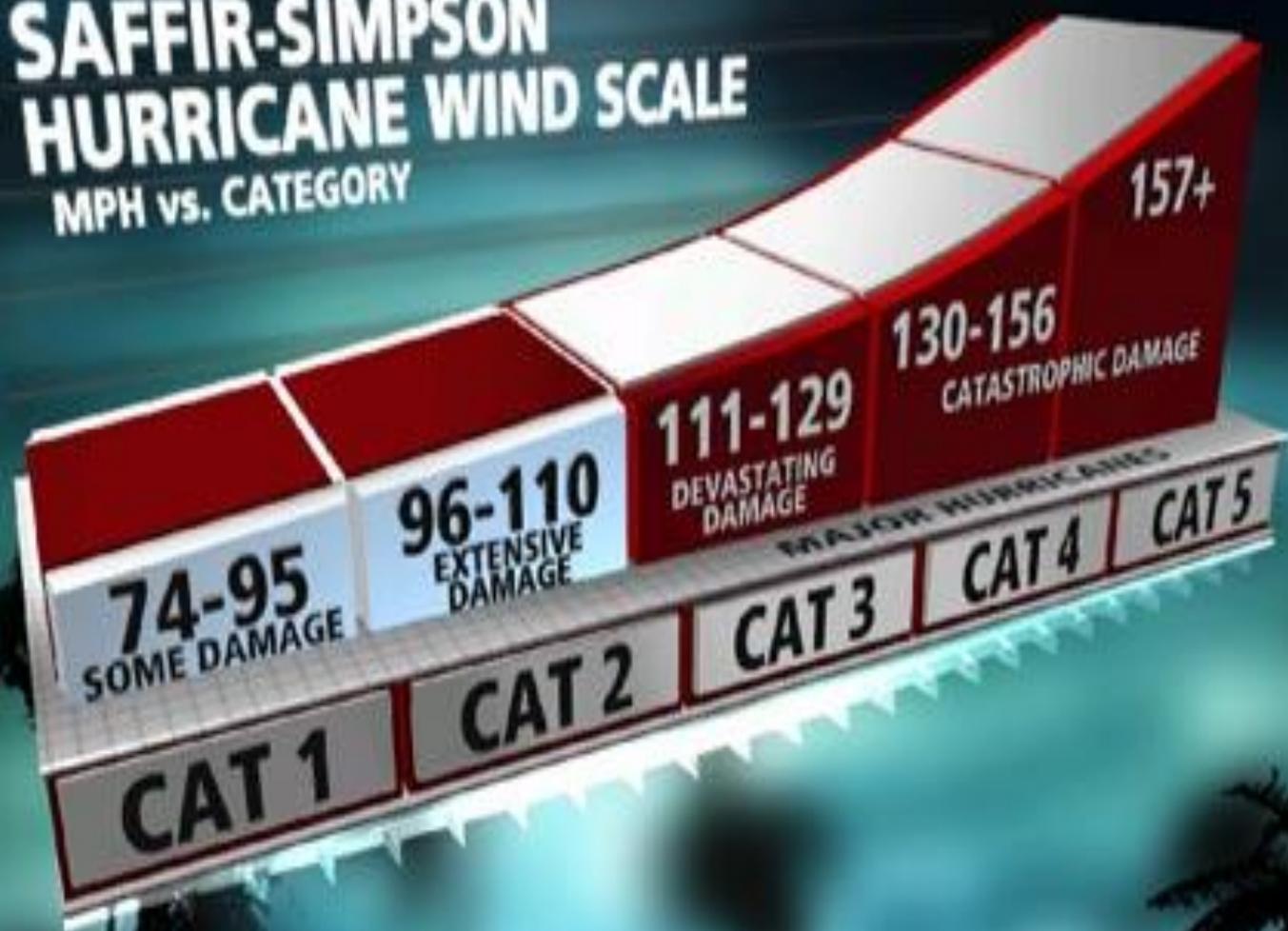
Hurricane Drivers - 2016

WARMER THAN NORMAL
IN GULF & ATLANTIC



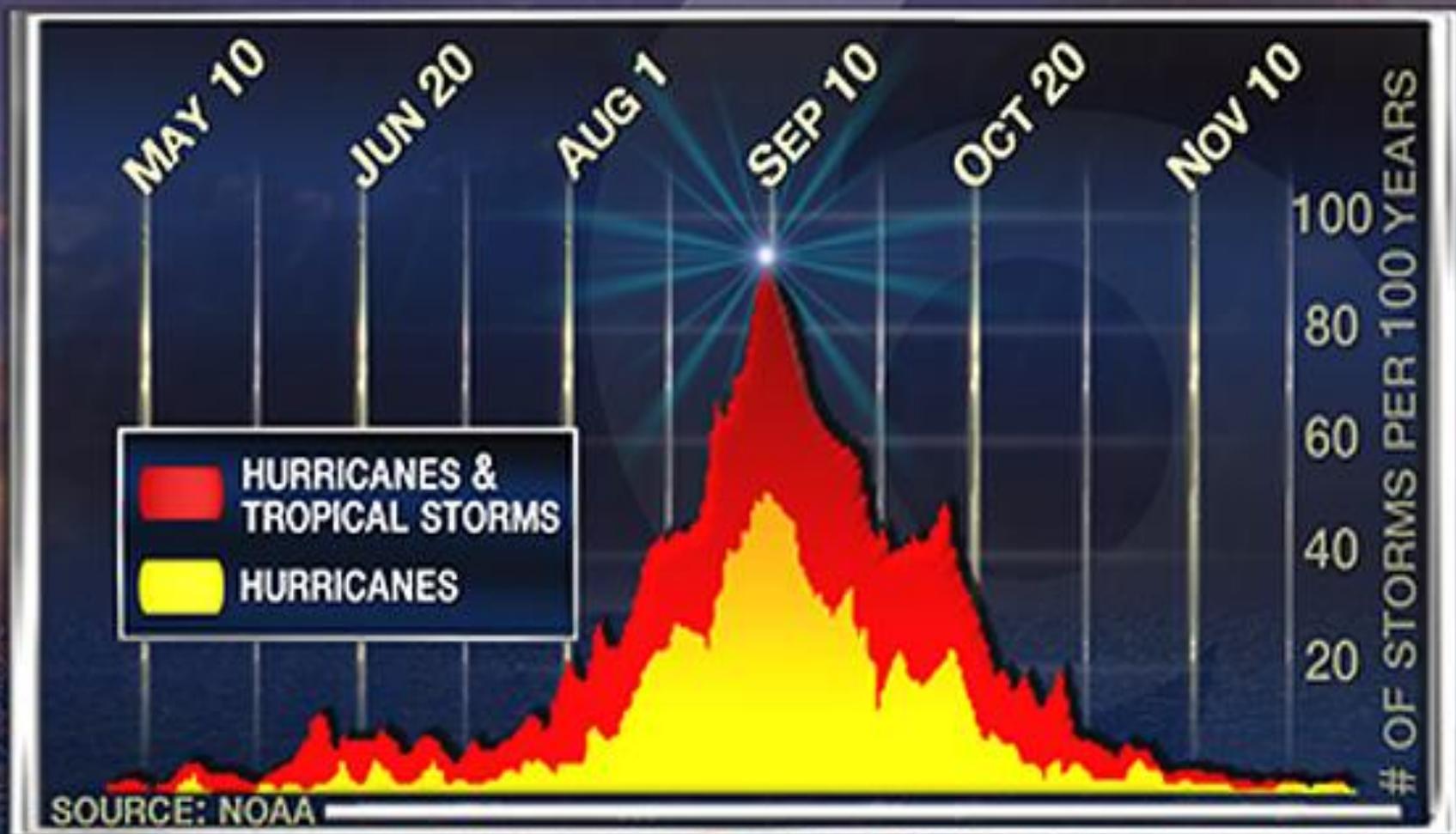
SAFFIR-SIMPSON HURRICANE WIND SCALE

MPH vs. CATEGORY



HURRICANE FREQUENCY

WFMY NEWS 2
WEATHER





POTENTIAL OCEAN COOLING

2016 Atlantic Hurricane Season

COLD BLOB

OCEAN CURRENTS

MAIN DEVELOPMENT REGION



2016 HURRICANE NAMES

ALEX

HERMINE

OTTO

BONNIE

IAN

PAULA

COLIN

JULIA

RICHARD

DANIELLE

KARL

SHARY

EARL

LISA

TOBIAS

FIONA

MATTHEW

VIRGINIE

GASTON

NICOLE

WALTER

**Staying
Informed**

**Websites
&
Apps**



INTERNET

National Hurricane Center:
<http://www.nhc.noaa.gov/>

My Fox Hurricane Tracking:
<http://www.myfoxburricane.com/>



GET IT ON

Google play

Available on

iTunes



A photograph of a coastal road during a hurricane. Palm trees are leaning heavily to the right, and a white truck is driving on the wet road in the distance. The sky is overcast and grey. A large blue banner with white text is overlaid on the center of the image.

**BE PREPARED THIS
HURRICANE SEASON**

HURRICANE READINESS

JUNE 1 — NOVEMBER 30



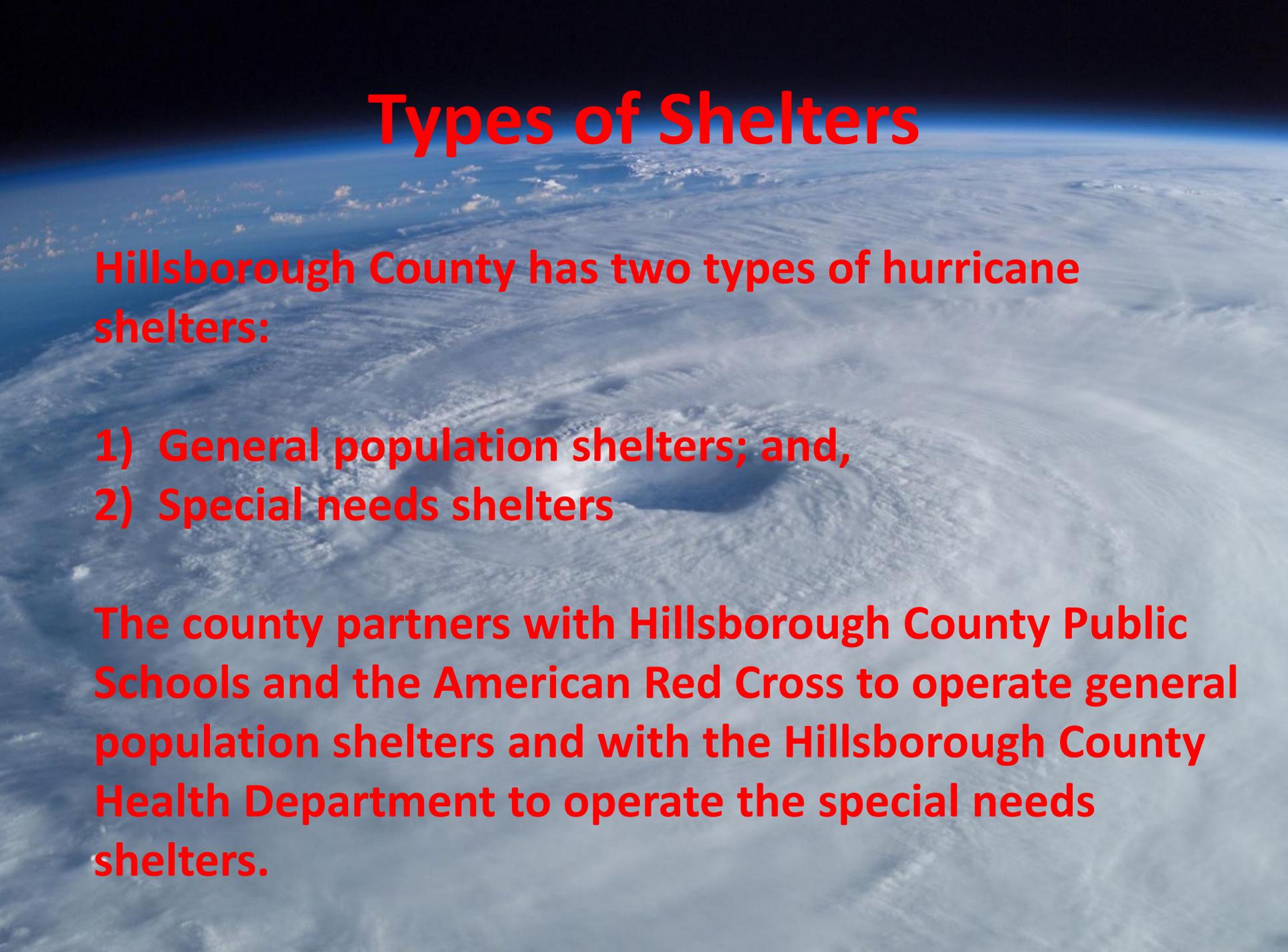
THINGS TO DO BEFORE THE STORM:

- **Review the City's CEMP**
 - Know the role of your department
 - Know your role as an individual
- **Make all necessary preparations, now!**
 - Supplies, generators, fuel
 - Prepare all equipment you will need
 - Prepare your employees for the storm
 - Review internal SOPs or guidelines
 - Rehearse critical components of your response

THINGS TO DO BEFORE THE STORM:

- Obtain, read, retain copies of the HC Hurricane Response Plan & related documents
 - Know where shelters are located in and around the City
 - Provide your employees with copies of the plan
 - Have a personal plan in place for your family
 - Prepare your home and your loved ones for the storm
 - Prepare your personal emergency go-bag or kit
 - Do the same for your family
 - Encourage your employees to follow your example

Types of Shelters



Hillsborough County has two types of hurricane shelters:

- 1) General population shelters; and,
- 2) Special needs shelters

The county partners with Hillsborough County Public Schools and the American Red Cross to operate general population shelters and with the Hillsborough County Health Department to operate the special needs shelters.

Shelter Availability

- The decision to open shelters will depend on the severity of the storm as well as local needs.
- Even if a shelter is on the official list it may not be opened or may change status during the approach of a storm.
- Specific shelter locations to be opened will be announced through local television and radio stations, Hillsborough County Emergency Management website, and are available by calling 813-272-6900.
- Please do not call 9-1-1 for shelter or storm information.



Do NOT wait until the last minute to prepare!



**Department /
Division
Responsibilities
Review**

City Commission

- **Promulgates the City's Comprehensive Emergency Management Plan (CEMP) for safeguarding life and property of Plant City citizens.**
- **Provides continuation of effective, orderly governmental control required for emergency operations through all phases of an impending or actual disaster.**
- **Delegates to the Executive Policy Council and the City Manager, as the Director of Emergency Management, the authorities delineated in the CEMP. (Section III.C.2)**

City Manager

- Serves as Director of Emergency Management.
- Provides direction and control over City disaster response and recovery operations.
- Directs City hazard mitigation and post-disaster redevelopment efforts.
- Issues emergency decisions as necessary under declared States of Local Emergencies.
- Advises and informs the Executive Policy Council in all disasters.
- Executes agreements with county, state, and federal disaster relief agencies.
- Directs and coordinates all City departments to ensure availability and response during all phases of a disaster.

Assistant City Manager

- Performs Emergency Management functions as delegated or assigned by the City Manager.
- Coordinates information gathering and sharing with all departments and the public.
- Monitors all elements and phases of disaster response and consults with the City Manager as necessary.
- Interfaces with Police and Fire Rescue regarding EOC activations at local, county, and state levels.
- Participates in EOC communications during all phases of disaster response.

Building Department

- Provides emergency building inspections and permitting procedures after a disaster.
- Conducts inspections of damaged structures to determine if demolition, stabilization, or repair is necessary before re-occupancy of buildings.
- Issues condemnation notices for structures unfit for use or habitation or dangerous to persons or other property.
- Partners with Code Enforcement to fulfill storm-related mission.

Code Enforcement

The background of the slide is a grayscale, textured image of a tropical beach scene. It features several palm trees of varying heights and orientations, some leaning. The ground appears to be a sandy beach with some sparse vegetation. The overall aesthetic is that of a hand-drawn or sketched illustration.

- **Partners with Building Department to accomplish that department's mission regarding safety inspections of storm-damaged structures.**
- **Performs other support functions as determined necessary by the City's emergency management leadership team.**

Community Services

- Plans for and conducts transportation operations to evacuate special needs elderly and disabled people to appropriate shelters.
- Returns “special needs evacuees” to their residences or appropriate temporary housing when appropriate.
- Provides annually and immediately prior to hurricane season a list of transportation resources available for emergency operations.

Engineering Department

- **Coordinates with the Building Official to provide personnel, equipment, and vehicles to support damage assessment operations.**
- **Assesses all Plant City roadway damage.**
- **Serves as liaison to county and state roads and bridges assessment teams.**
- **Prepares maps detailing location of damages, clearings and assessments for documentation after storm event.**

Finance Department

- Ensures continuity of City fiscal operations after a disaster, including employee payroll, purchasing, and contracting.
- Provides support in processing requests for financial information for federal disaster assistance.
- Maintains a list of sources for equipment and services that may be purchased or leased for disaster response & recovery activities.
- Contracts for needed equipment and services to address the City's needs during response & recovery operations.
- Identifies potential facilities for use in disaster response & recovery operations.

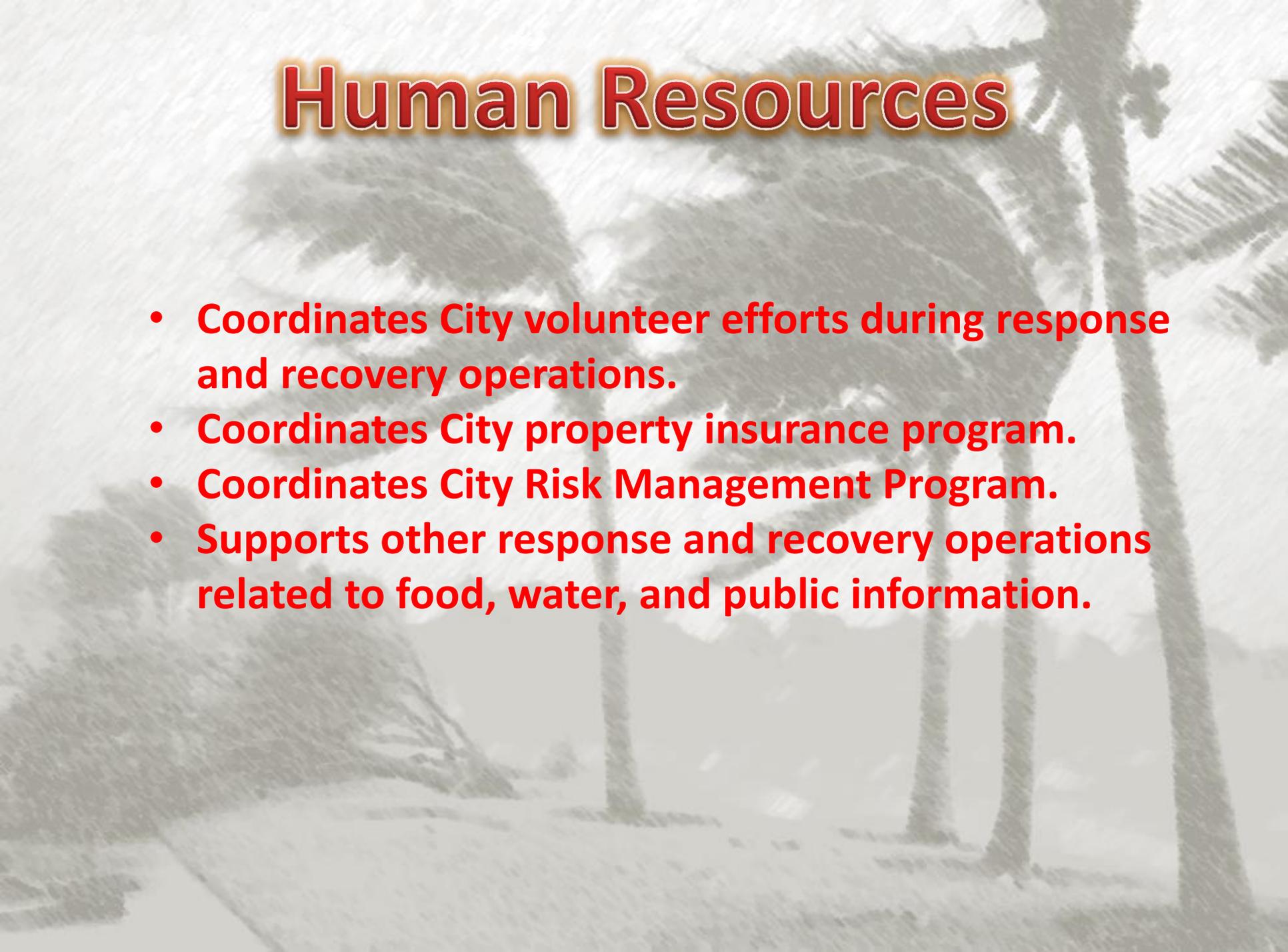
Fire Rescue

- **Assists in disaster response & recovery activities.**
- **Notifies residents of evacuations in coordination with the Police Department.**
- **Provides disaster-related search & rescue operations.**
- **Provides first responder services, personnel, and equipment for casualty operations.**
- **Provides EMS services as necessary.**
- **Coordinates mass casualty operations.**
- **Directs City search and rescue operations.**
- **Coordinates with Hillsborough County EOC.**

General Services

- **Coordinates the restoration of energy systems and availability of petroleum products for response and recovery operations.**
- **Ensures City buildings are as storm-ready as possible. Assists in securing buildings as necessary.**
- **Ensures continuity of fleet operations for public safety and other mission-critical vehicles and equipment during the response and recovery phases of disaster operations.**

Human Resources

The background of the slide is a grayscale, textured image of a tropical beach. It features several palm trees of varying heights and a thatched-roof hut on the left side. The overall aesthetic is that of a hand-drawn or sketched scene.

- **Coordinates City volunteer efforts during response and recovery operations.**
- **Coordinates City property insurance program.**
- **Coordinates City Risk Management Program.**
- **Supports other response and recovery operations related to food, water, and public information.**

Information Technology

- Provides LAN, GIS, and communications support to the City's Emergency Operations Group.
- Ensures adequate backup data automation is available.
- Implements continuity of business practices and measure pre-event.
- Works to restore data operations, networks, and other communications resources during the recovery phase.

Bruton Memorial Library

- Directs citizen service activities during disaster response and recovery operations.
- Maintains records of emergency assistance separate from ongoing assistance programs.
- Coordinates citizen services among county agencies, American Red Cross, and state & federal agencies.
- Plans citizen activity response in disaster situations.
- Informs media and public about food and water availability and homeowners' precautions during disaster situations.
- Coordinates with EOC Public Information Officer during disaster response & recovery operations.

Recreation & Parks

- Removes debris from parks and recreation facilities and coordinates with Solid Waste Department for its disposal.
- Provides personnel resources for various essential disaster response and recovery operations, including debris clearance, mass care operations, and reception & distribution of disaster relief supplies.
- Works with Community Services Department to address transportation needs.

Police Department

- Maintains law and order during disaster/emergency operations.
- Executes city or county evacuation orders. Controls traffic flow as deemed necessary.
- Notifies residents of evacuation zones and evacuation orders in coordination with the Fires Department. Assists residents in evacuating, if necessary.
- Provides security and law enforcement at City public shelters.
- Supports damage assessment teams as necessary.
- Coordinates with Hillsborough County EOC.

Solid Waste

- Controls disposal of disaster-related debris.
Designates disposal sites for various debris.
- Prepares and equips all disposal sites to receive disaster –related debris.
- Requests EPC waivers for debris burning, if necessary.
- Disposes of contaminated or spoiled foodstuffs.
- Maintains detailed records of manpower, equipment, and financial resources used in debris clearance and disposal for federal disaster assistance reimbursement.
- Coordinates with all City debris management contractors.

Streets / Stormwater / Traffic

- Prepare sand bags for pick up by citizens
- Prepare and deliver sand bags to disabled citizens' homes.
- Coordinates removal of debris from storm water systems before and after storm event.
- Conducts street clearing and traffic flow support operations during evacuations and recovery operations.
- Coordinates roadway safety with the Police Department.
- Provides support to disaster preparation and recovery operations as necessary.

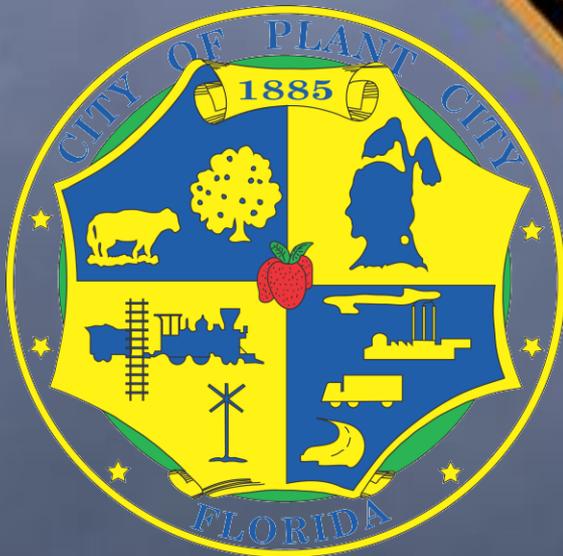
Utilities Department

- Prepares City utility facilities in advance of an impending hurricane.
- Coordinates recovery activities for City utility facilities after a storm passes.
- Restores water/sewer and other utility operations as necessary.
- Monitors impact of storm events on City utility facilities, to include flow levels, peaks, and discharge events.

Get
Ready

HURRICANE
SEASON

Now!!!



This presentation was compiled by the City of Plant City, Florida, for emergency management and preparation briefings of City staff and other interested individuals and/or organizations. This presentation was compiled as a public service.



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