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## Break the Grip of the Rip!

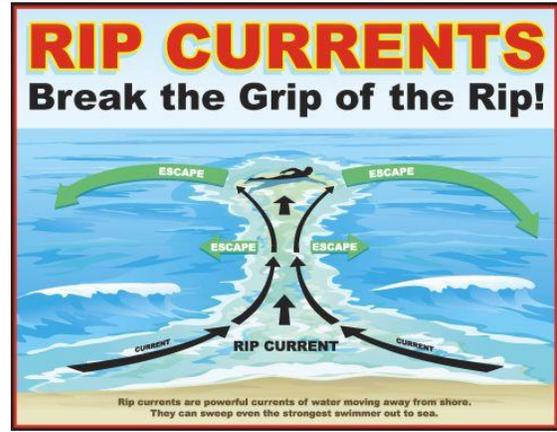
By: Nicole Carlisle

Rip currents are a common and dangerous occurrence at our beaches. On average, more people die every year from rip currents than from shark attacks or lightning. According to the United States Lifesaving Association, 80% of surf beach rescues are attributed to rip currents. Our beaches here in Florida are beautiful and very popular and if you are one of the many residents or visitors who frequent the beach, it's critical that you understand what rip currents are, how to identify them, and most importantly, how to "Break the Grip of the Rip!"

So what is a rip current? And how do you identify them if you're at the beach? Rip currents are powerful channels of water flowing away from shore and they typically extend from the shoreline past the line of breaking waves. They can occur at any

beach with breaking waves, and this includes the Great Lakes! There are several ways you can identify rip currents if you're at the beach. These clues include: a channel of churning, choppy water; an area with a noticeable difference in water color; a line of foam, seaweed, or debris moving seaward; and a break in the incoming wave pattern. A pronounced rip current is pictured below.

If you're at the beach and thinking about going in the water, remember a few important safety tips. The first is to know how to swim. And whenever possible, swim at a lifeguard-protected beach. If you get caught in a rip current, it's important to avoid fighting the current. Swim parallel to the shore until you are out, and then head toward the beach. And finally, when in doubt, don't go out!



## “No Regret”

Original Poetry By: Thomas Dougherty

Granite cliffs loom dark and near  
creeping closer the beast gives fear  
hidden in the woods under faint moonlight  
the trees will shake, birds take flight

A bright light crackles and shocks the soul  
my heart skips a beat, but then relief  
faster and farther  
through the night I must go  
my spirit undaunted, my heart tells so

Others safe and warm  
would think I'm quite odd  
I can only agree  
and give 'em a nod

As the rumbles soften  
my path soaking wet  
I smile for me  
and have no regret

# 2013 Hurricane Season Outlook

By: Daniel Noah

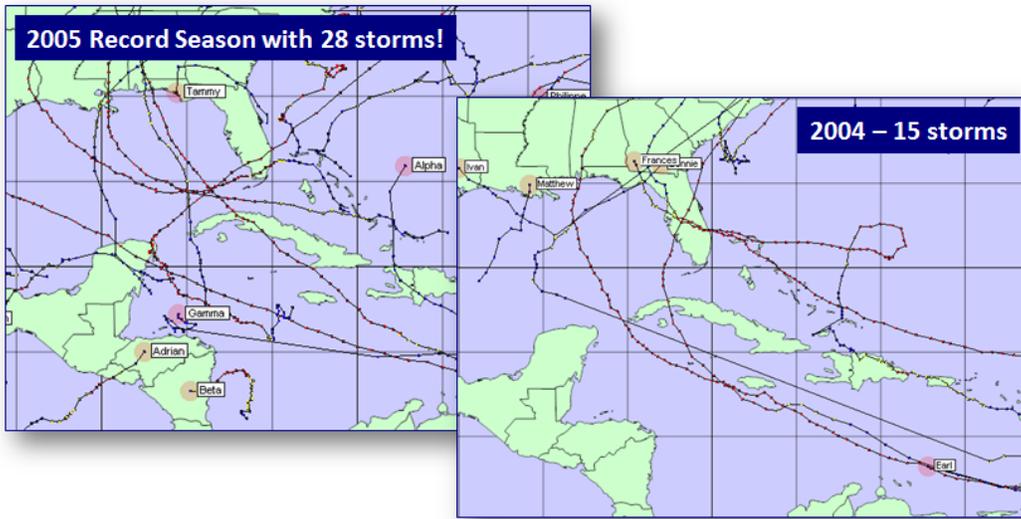
Hurricane season forecasts are a great tool to raise awareness of the upcoming hurricane season and to get people thinking about preparing for a possible storm. Government agencies, universities, and those in the private sector all issue forecasts for the upcoming Hurricane Season, but what do they really mean? It only takes one storm to ruin your day. It doesn't matter if the forecast is calling for a below or an above normal season and no one can predict landfall areas months in advance. Prepare for one storm each year, and then don't worry about it until something approaches the area.

The 2013 NOAA Hurricane Season Forecast is below along with the numbers for a normal year and the prior three years.

	2013 Forecast	Normal Season	2012	2011	2010
Named Storms	13-20	12	19	19	19
Hurricanes	7-11	6	10	7	12
Major Hurricanes	3-6	2	1	4	5

Notice that the 2013 Hurricane Season forecast could be as active as each of the last three years. There were 19 named in 2010, 2011, and 2012, which all tied the third most active hurricane season on record. This sounds incredible as many who live in our area don't remember that much activity. This is because the forecast includes all of the Gulf of Mexico, Caribbean, and the Atlantic Ocean. That is over 5,000 miles from Brownsville, TX to the African Coast. Many of the named storms were "Fish" storms and stayed in the Atlantic.

Do you remember the most active hurricane season on record? It was 28 named storms in 2005. We ran out of names and had to use the Greek Alphabet. Zero of these storms impacted Winter Haven. However, in 2004, Winter Haven felt the impact of three hurricanes.



The moral of the story is to prepare for one storm each year. Make a plan, build a kit, and be informed. Visit <http://www.ready.gov> to get started today.

## 2013 Tropical Cyclone Names

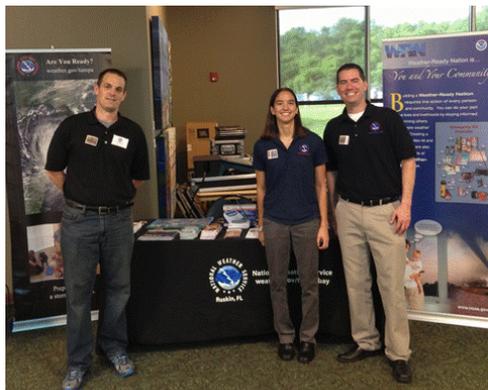
✓ Andrea	Humberto	Olga
✓ Barry	Ingrid	Pablo
✓ Chantal	Jerry	Rebekah
Dorian	Karen	Sebastien
Erin	Lorenzo	Tanya
Fernand	Melissa	Van
Gabrielle	Nestor	Wendy

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## 2013 Tampa Bay Hurricane Expo at MOSI

By: Nicole Carlisle

On June 1st, the City of Tampa and Hillsborough County partnered with the Museum of Science and Industry (MOSI) in Tampa, FL to host the 2013 Tampa Bay Hurricane Expo. This year's theme was "resiliency" and the slogan was: "Thrive. Survive. Stay Alive." Personal preparation and the importance of taking actions prior to a disaster to ensure that you can recover successfully have always been the focus of the Tampa Bay Hurricane Expo. Attendees got the chance to learn what to do before, during, and after a storm and to visit a variety of booths for vendors, city planners, weather experts, and others. Two meteorologists from the Tampa Bay Area NWS office, Meteorologist-In-Charge Brian LaMarre and Meteorologist Nicole Carlisle, staffed a booth at the Expo where they talked with people about hurricanes and weather safety. They were joined by several members of the West Central Florida Chapter of the American Meteorological Society, who drew groups of kids and adults with fun and informative weather experiments. Brian was also a part of two question-and-answer weather panels alongside meteorologists from local television stations, during which members of the public were able to get even more information about tropical cyclones and disaster preparedness directly from the experts. Preparedness is a key because no matter how many named storms are forecast for hurricane season as it only takes one storm to change your life forever. See the following link for information on how to put together a supply kit for yourself and your family: <http://www.ready.gov/basic-disaster-supplies-kit>



Meteorologist-In-Charge Brian LaMarre, Meteorologist Nicole Carlisle with David Faysash of the West Central Florida Chapter of the AMS at the NWS/AMS booth.



Meteorologist Nicole Carlisle and West Central Florida AMS President Jennifer Collins with David Feller and David Faysash of the West Central Florida Chapter of the AMS.



Meteorologist-In-Charge Brian LaMarre with the Tampa Police Tactical Response Team Rescue Vehicle.



President and Vice President of the West Central Florida Chapter of the AMS, Jennifer Collins and Nicole Carlisle, respectively, with two members of Tampa Fire Rescue.

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## Tropical Storm Andrea Rewind

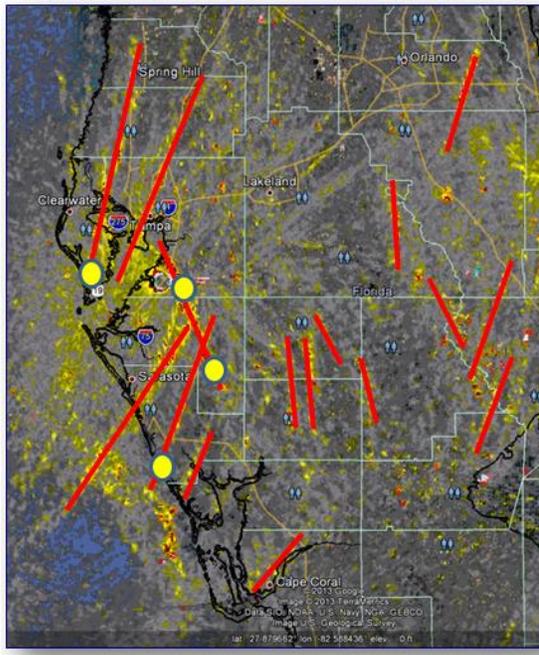
By: Dan Noah

Tropical Storm Andrea was the first storm of the 2013 Hurricane Season. Andrea developed in the Gulf of Mexico on June 5 and made landfall in the Florida Big Bend area on June 6. In west central and southwest Florida, Andrea created minor coastal flooding, at least 4 tornadoes, and minor fresh water flooding.

Peak sustained winds in the Gulf were around 65 mph, but were less along the coast and inland areas. Coastal areas north of Clearwater received gusts of 40 to 60 mph while areas to the south saw gusts of 30 to 50 mph as Andrea's rain bands came onshore.

Heavy rains of 3 to 6 inches across the area were mostly absorbed by the dry ground and put an end to our fire weather season. The impact of the rain was limited to ponding of water on roads and minor river flooding near Myakka and Arcadia.

Of special interest were the tornadoes in Tropical Storm Andrea. The graphic below shows the tracks of violently rotating updrafts tracked by Doppler radar (red lines) and locations of tornado damage (yellow circles).



- Tornado Damage
- Path of rotating updrafts



National Weather Service damage surveys indicated destruction to light structures at the surface, but much more violent winds at the tree tops. Damage was sporadic along the track and was like looking for a needle in a hay stack. We know we had more than 4 tornadoes, but we can only document what we can prove.

Tropical Storm Andrea developed fast and left in a hurry. Florida residents did not get 7 days of notice that something was coming our way. Andrea had a one day heads up and the impact lasted for less than 24 hours. Visit <http://www.ready.gov> to make a plan, build a kit, and be informed.

## SPECIAL FEATURE: ER-MET On-Site Support and Partners

By: Rick Davis

As part of the new NWS Weather Ready Nation initiative, The Tampa Bay Area (TBW) WFO Pilot for integrate environmental and decision-support services continues to provide enhanced decision support services for public safety to local emergency managers during large events. The ER-Mets and TBW meteorological staff continues to coordinate and collaborate with multi-agency partners.

### Recent examples of On-Site support:

- Gasparilla Invasion and Parade (January): TBW ERS provided on-site weather support at the Tampa EOC providing weather forecasts and briefings that included a spot forecast, general marine and county forecasts, and Hysplit plume forecasts that were shared throughout the unified command center.



**Todd Barron and Nicole Carlisle providing ERS EOC support for Gasparilla (1/26)**

- Seven different Tampa WFO meteorologists were able to participate in providing on-site support in the Polk County Mobile Command Center daily from the EOC set up through main events. The on-site staff provided weather forecasts and briefings, which included a spot forecast, general aviation and county forecasts.



**Facebook post featuring ER-Met Rick Davis, Senior Met Jen Colson, and Polk EM**

- Todd Barron provided onsite support for the Polk County Emergency Management from the Polk County Sherriff mobile command center during the main event, which included one stand up briefing and weather updates regarding scattered thunderstorms around the area during the event.



**Todd Barron completes the 5:15AM Briefing.**

**Recent examples of multi-agency partners' coordination and collaboration meetings:**

- NOAA Sea Grant Florida: NOAA Sea Grant Florida – University of Florida Institute of Food and Agriculture Sciences (IFAS) extensions. IES Team met with a group of UF/IFAS Extension NOAA Sea Grant is part of a nationwide educational network that brings research-based information to communities—an “extension” of the personnel, resources, and programs of academia and the federal government.



**Group Photo from the NOAA Sea Grant Florida Meeting on Jan 30th**

- NWS Environmental Stakeholder Workshop: In March, the National Weather Service (NWS), Weather Forecast Office (WFO) in Ruskin, FL hosted an “Ecological/Environmental Stakeholder Meeting” at the NOAA Marine Fisheries Southeast Regional Office in Saint Petersburg, FL. The purpose of the meeting was to provide attendees with training on current NWS products and services and to explore how weather impacted their operations as well as local ecological systems. Attendees included around 35 scientists and administrators representing nearly 20 agencies with ecological and/or environmental interests in the region. Information gathered during this workshop will be utilized to develop a weather impacts catalog for the various environmental agencies.



**Dan Noah, Brian LaMarre, and Charlie Paxton participate in the Workshop**

Information gathered will help guide the IES team in areas of strongest need regarding environmental/ecological product/service development.

- Storm Surge Marketing Team meeting to engage in dialogue and gather feedback on storm surge communication needs and challenges with the WFO and its key stakeholders/partners that occur during a storm. These stakeholders/partners included: Emergency Management Community, Broadcast Media, Community Groups and Decision-makers.



**Rick Davis and Mike Gittinger discuss storm surge with Emergency Mangers**

- Florida Department of Transportation (FDOT): The IES team met with the Florida DOT Emergency Response team for the West Central and Southwest Florida districts at the Tampa Bay Area WFO. The Emergency Response teams discussion focused on weather's effect on transportation around the area, especially fog and wind events, FDOT Emergency Management, as a vital element of the State Emergency Response Team, responsible for preparing for, responding to, recovering from and mitigating against emergency situations that affect the state's inter-modal transportation systems.



**Emergency Response Meteorologists and NWS TBW personnel meet with Florida DOT Emergency Response Team from the Southwest and West Central Districts**

- Florida Department of Environmental Protection (FDEP): The IES team met with the Florida DEP Emergency Response team for the southwest district at the Tampa Bay Area WFO. The Emergency Response team discussed vulnerabilities to weather during HAZMAT and spill cleanup operations which they respond to. Rick Davis provided brief training regarding spot forecast requests and other web based capabilities available through the NWS web site.



**ER-Mets meet with Florida DEP Emergency Response Team for the SW District**

- Florida Fish and Wildlife Commission (FWC): The IES team met with the Southwest Region Director at the Lakeland Office. The discussion focused on weather's effect on FWC operations



**Mike Gittinger next to FWC aerated mobile tank used to transport live fish**

- Gulf of Mexico Alliance (GOMA) 2013 All Hands Meeting: IES team members, attended the 3 day multi-agency conference with partners from around the Gulf of Mexico, to Build Partnerships for a Healthier Gulf at the GOMA conference. Topics and sessions included; Gulf Restoration Opportunities, GOMA in the Community, Environmental Justice, Gulf Networks, Habitat, Conservation and Restoration, Ecosystem Integration and Assessment, and Coastal Community Resilience.



**Todd Barron was a panelist for the Gulf Networks segment and presented on NWS Weather Ready Nation**

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## Thank You to all!

Editor: Jennifer Colson – Senior Forecaster

Contributors: Dan Noah – Warning Coordination Meteorologist  
Rick Davis – Emergency Response Meteorologist  
Nicole Carlisle – Journeyman Forecaster  
Thomas Dougherty – Observations Program Leader