

CEMA Signal



2016 Atlantic Hurricane Season Outlook: Near-Average Activity

Colorado State University hurricane researchers are predicting a near-average hurricane season for the Atlantic basin in 2016, citing two competing factors. While El Niño is weakening and is likely to dissipate prior to this summer, the far North Atlantic is quite cold. The absence of El Niño should reduce the strong upper-level westerly winds that were present in the Caribbean and across portions of the tropical Atlantic last season. However, the cold far North Atlantic often generates atmospheric conditions associated with increased sinking motion and stable air across the tropical Atlantic.

The CSU Tropical Meteorology Project team is predicting 12 named storms during the Atlantic hurricane season, which runs from June 1 to November 30. Of those, researchers expect five to become hurricanes and two to reach major hurricane strength (Saffir/Simpson category 3-4-5) with sustained winds of 111 miles per hour or greater. These forecast numbers do not include Hurricane Alex, which formed in January.

The team bases its forecasts on over 60 years of historical data that include Atlantic sea surface temperatures, sea level pressures, vertical wind shear levels (the change in wind direction and speed with height in the atmosphere), El Niño (warming of waters in the central and eastern tropical Pacific), and other factors.

The team predicts that 2016 hurricane activity will be about 95 percent of the average season. By comparison, 2015's hurricane activity was about 65 percent of the average season. The CSU team will issue forecast updates on June 1, July 1 and August 3. This is the 33rd year that the CSU hurricane research team has issued the Atlantic basin season hurricane forecast. William Gray, professor emeritus of atmospheric science, launched the report in 1984. The CSU forecast is intended to provide a best estimate of activity to be experienced during the upcoming season – not an exact measure.

-- Courtesy of CSU External Relations Staff

EXTENDED RANGE ATLANTIC BASIN HURRICANE FORECAST FOR 2016

Named Storms- 12
Named Storm Days- 50
Hurricanes- 5
Hurricane Days- 20
Major Hurricanes- 2
Major Hurricane Days- 4



2016 HURRICANE
NAMES:

Alex
Bonnie
Colin
Danielle
Earl
Fiona
Gaston
Hermine
Ian
Julia
Karl
Lisa
Matthew
Nicole
Otto
Paula
Richard
Shary
Tobias
Virginie
Walter

A Message from the Director



Hurricane Edition! We have seen a growing trend of Hurricanes occurring outside of the traditional June – November season. As such, it requires us to work earlier, and later, to ensure a prepared community. We have already started conducting pre-season hurricane coordination meetings. We started earlier than usual, and it looks like next year we will need to start even earlier. The need is certainly trending to year-long hurricane planning.

We initiated several programs at the beginning of the year, and we have been very excited about how you have supported these efforts.

1) **Whole Community Emergency Management:** This initiative works on the concept that a disaster affects the whole of the community...not one person...not one area...not one jurisdiction...but the whole. Any disaster is a Whole Community event. The Emergency Management Program must ensure Whole Community engagement. Along with this concept is the engagement of Executive Leadership across the community. Historically, our planning efforts have primarily centered around mid-level managers and worked on a bottom-up approach. With Whole Community Emergency Management, our focus is top-down. We do that by ensuring the County / City Managers and the Chairman / Mayors are actively engaged in the direction of the program. We are seeing tangible benefits already.

2) **Emergency Management Program Advisory Committee (EMPAC):** This initiative is the implementation arm of Whole Community Emergency Management. The EMPAC was established to get greater feedback and direction for how the Program should evolve. Our first two meetings were well attended with representatives from each municipal government, private sector, as well as federal and state partners. The diversity in each meeting reflects our community and allows us to have an active dialog about where we have been, where we are now and where we are going. Through the EMPAC, partners are able to provide constructive criticism and recognized success witnessed in the Program. I encourage you to turn to page 14 to read more about the EMPAC.

3) **Chatham Animal Response Team (CART):** This initiative is the FIRST in the State of Georgia! Staff and volunteers are very excited about this program. Hurricane Katrina continues to provide learning opportunities and one of the things that still rings clear is that pets are family. We know people won't evacuate unless sufficient measures are in place for their pets and in that regard, we still had work to do. To fill the gap, we teamed up with the Florida State Animal Response Coalition to train volunteers on emergency pet handling, evacuation and sheltering. We are extremely proud of this program.

4) **Training and Exercise:** You asked for more training. You asked for more exercises. We heard you! We have reorganized internally and created a dedicated staff member to managing the Training and Exercise program. And, let me tell you...he has taken it very seriously and has been working aggressively to make this happen for you. In the first quarter alone, we have conducted 12 training sessions and five exercises. For the second quarter, we have 21 training events and seven exercises scheduled. I'm not sure how he is keeping pace, but he is doing a phenomenal job.

I could go on and on, but you have more to read. Enjoy this Newsletter, and Happy Hurricane Season.

Dennis Jones
Director



To learn more about the Chatham
Animal Response Team, see page 12.

County Emergency Operations Center Exercise

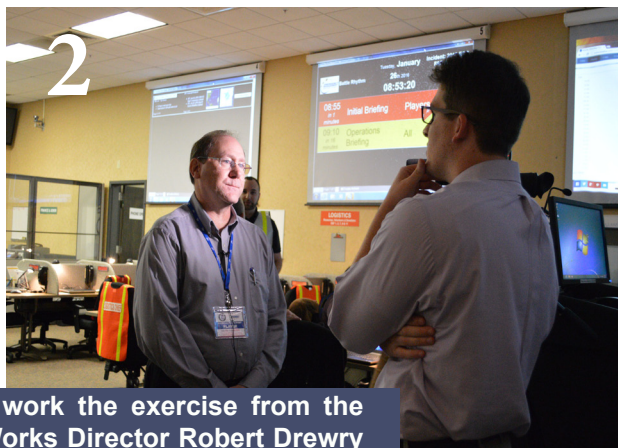
In January, Chatham County hosted the First Ever Coastal Empire Hot Air Balloon and Schnitzel Festival. You say you didn't hear about that one..., didn't get a chance to check it out? Probably because the Festival had very little advertising and happened on paper only. It was actually an Emergency Response Exercise where the all Festival events were on a written script.

On the morning of January 26th, Chatham Emergency Management conducted a Level II Activation of the County EOC. A Level II activation brings together selected agencies and organizations designated to support an event. Their objectives while at the EOC were to maintain situational awareness, ensure the safety of citizens and response personnel, confirm the readiness of ESFs and support infrastructure, and to manage a coordinated emergency response if needed.

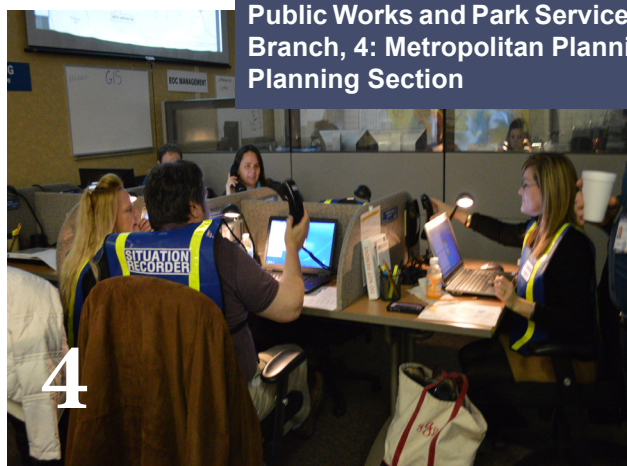
Just as it happens during real events, at the beginning of the exercise participants were briefed on what was happening and what resources were available (notionally). Shortly after the briefing, workstation phones in the EOC began to ring and radios came alive. Exercise staff working in a Simulation Cell (SimCell) began to call in to the EOC passing along situations and information provided by the exercise script, requiring the EOC Staff to obtain initial situational awareness. It did not take long for participants to forget the phone calls and radio traffic were all part of an exercise and they settled into doing what they do best, coordinating public safety services within Chatham County.

The exercise scenario challenged the EOC Staff with more challenges than would normally be expected during a week-long event. Those issues ranged from the typical traffic problems, to foodborne health issues, a fireworks explosion, and even an untethered 'runaway' hot air balloon. On top of the "Festival" events, EOC Staff had to coordinate response activities to a derailed train posing a hazard to the west side of the County.

All of these activities were compressed into a very short 2 hours. Following the exercise, most after action comments indicated we should conduct more scenario driven exercises involving multiple agencies under realistic (simulated) conditions. Our thanks to our Partner organizations participating in the exercise: American Red Cross – Savannah Chapter, Beaufort County SO/EMA, Burke County EMA, Chatham County Health Department, Chatham County Information & Communications Services, Chatham County Public Works, Chatham County – Savannah Metropolitan Planning Commission, Chatham EMA Volunteers, Georgia Department of Family and Children Services, CSX Railroad, Savannah-Chatham Metropolitan Police Department, Southside Fire and Emergency Services, University of South Carolina - Beaufort EM, and WTOC-TV.



1: Southside Fire and EMS work the exercise from the Operations Section, 2: Public Works Director Robert Drewry is interviewed by WTOC's Ben Williamson, 3: Department of Public Works and Park Services assisting in the Infrastructure Branch, 4: Metropolitan Planning Commission working in the Planning Section



Are You Ready for Hurricane Season?

According to a Ready Georgia study, 73 percent of Georgians do not know the designated evacuation routes from their community, and 71 percent have not arranged a family meeting place or reconnection plan.

Although Georgia hasn't weathered a major hurricane in recent years, Georgia's coast remains at risk for hurricanes that form in the southern Atlantic Ocean, Caribbean Sea and Gulf of Mexico. With Hurricane Preparedness Week beginning May 15th, now is the time for all Georgians to prepare and recognize the risks and potential dangers of hurricanes and what to do before, during and after a storm. Chatham Emergency Management Agency will focus on a different aspect of preparedness each day. Use this list as a guide to start important conversations with your family and friends. Don't wait until the storm comes. Plan now!

Sunday, May 15: Know Your Risks! Because of our low elevation and geographical makeup, Chatham County is especially vulnerable to storm surge. Storm surge is an abnormal rise of water generated by a storm's winds that can reach heights over 10 feet and flood nearly all of Georgia's coastal counties. Believe it or not, storm surge is responsible for the greatest number of hurricane fatalities. In a category 3 hurricane, about 75 percent of Chatham County would be under 17 to 23 feet of water!



Monday, May 16: Develop an Evacuation Plan! Use this time to figure out where you are going to go and how you will get there if an evacuation was ordered. Do you have family or friends far away from the storm that you can stay with for an extended period of time? If so, go there! Shelters will be cramped and should be your last option. Plus, most shelters don't accept pets. Make sure you take them with you! Most will not survive if left behind.

Tuesday, May 17: Check Your Insurance! Hurricanes can produce high winds that add to a storm's destructive power. Hurricane-force winds can easily destroy poorly constructed buildings and mobile homes. Winds can stay above hurricane strength well inland. In addition to destructive winds, hurricanes also can spawn dozens of tornadoes. Call your insurance company or agent and ask for an insurance check-up to make sure you have enough homeowners insurance to repair or even replace your home. Don't forget coverage for your car or boat. Remember, standard homeowners insurance doesn't cover flooding.

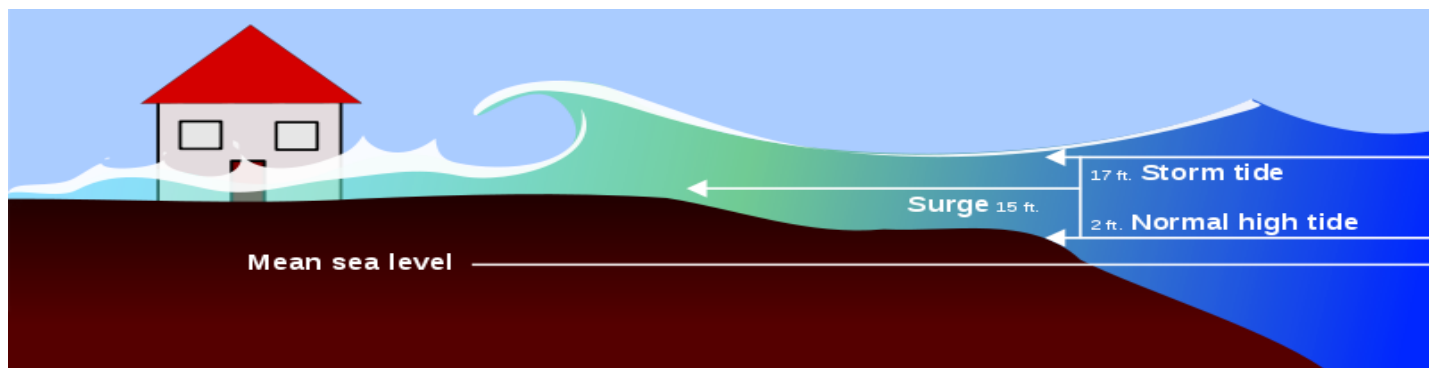
Wednesday, May 18: Build an Emergency Kit! You're going to need supplies not just to get through the storm but for the potentially lengthy and unpleasant aftermath. Have enough non-perishable food, water and medicine to last each person in your family a minimum of one week. We recommend one gallon of water per person, per day. Electricity and water could be out for at least that long. You'll need extra cash, a battery-powered radio and flashlights. Check out our emergency kit checklist on page 17 or downloading the ChathamEMA mobile app. A customized communications plan and Ready kit checklist can be created and shared through the app. The best part? It's free for Apple and Android users!

Thursday, May 19: Strength Your Home! Hurricanes are vicious storms. Adding some extra protection to your home could save you time and money later. Have the proper plywood, steel or aluminum panels to board up the windows and doors. Remember, the garage door is the most vulnerable part of the home, so it must be able to withstand the winds. Yard furniture can become deadly missiles in a hurricane's high winds. Bring them indoors or properly secure before evacuation.

Friday, May 20: Stay In The Know! Where will you turn for trusted information? You can sign up for CEMA's Emergency Alerts and have them sent directly to your phone via text. Just text "follow ChathamEMA" to 40404. NOAA Weather Radios are also an invaluable resource to ensure your family stays weather ready.

Saturday, May 21: Have a Plan After the Storm! Local authorities may not be able to provide information about what is happening in your area. Listen to a NOAA Weather Radio, watch TV, listen to the radio or monitor the Internet for official news and instructions as they become available. To help residents prepare for hurricanes and other emergencies, CEMA provides online tools to make a disaster supply kit, develop a tailored communications plan and stay informed about potential threats. Visit ChathamEmergency.org to find helpful information on how protect your pets, elderly or disabled family members, and tips on preparing for severe weather.

Storm Surge: Know Your Risks

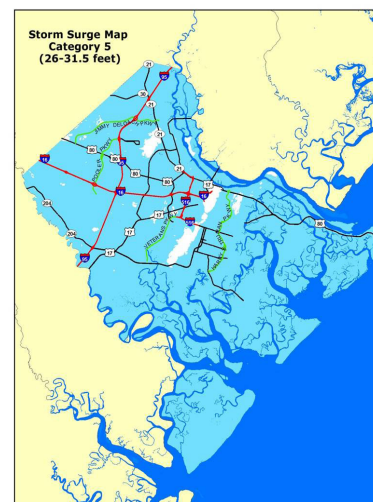
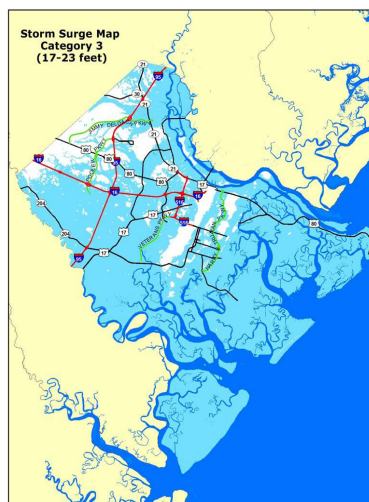
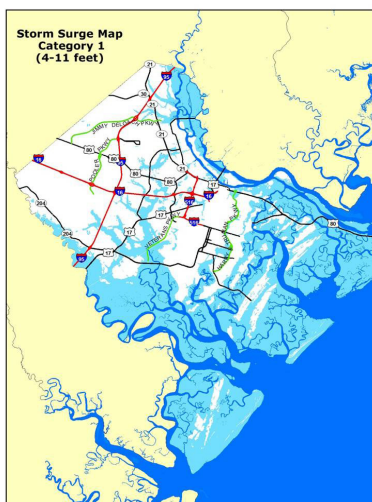


It is no secret that Chatham County is vulnerable to the threat of Tropical Storms and Hurricanes. With our low elevations and significant flooding potential, the storm surge from a major hurricane making landfall on our coast could have catastrophic consequences. Likewise the winds from one of these systems could create millions of cubic yards of debris clogging our streets and highways and damaging or destroying property on an enormous scale.

Storm surge happens when the surface of the sea rises due to the force of the hurricane's winds spiraling in towards the center of the storm. Storm surge can reach heights of more than 30 feet near the center of a Category 5 hurricane. In very large hurricanes, the surge can horizontally fan out over several hundred miles of coastline, gradually diminishing well away from the center. The surge of high water topped by battering waves can be devastating. It is important to note that the stronger and larger the size of the hurricane and the shallower the offshore water, the higher the surge will be. Storm surge is by far the greatest threat to life and property along the Georgia coast. In the past, large death tolls have resulted from the rise of the ocean associated with many of the major hurricanes that have made landfall. Hurricane Katrina (2005) is a prime example of the damage and devastation that can be caused by surge. At least 1500 persons lost their lives during Katrina and many of those deaths occurred directly, or indirectly, as a result of storm surge.

For Chatham County, the effects of storm surge can be catastrophic. Storm surge estimates are higher for our area due to unique geographical features, like shallow waters offshore and a slow sloping shelf. For instance, a typical Category 3 hurricane in our area could be expected to result in a storm surge of anywhere between 17-23 feet. In Chatham County, a Category 1 hurricane would leave Tybee Island and just about all of coastal Chatham under water. With a Category 3 storm, areas inland like Garden City and Pooler would be covered in water. The entire county would be inundated with water with a Category 5 hurricane.

The Storm Tide is the combination of the storm surge and the astronomical tide (normal daily tide). If the storm surge arrives at high tide, the water height will be even greater. For example, as a hurricane moves ashore, a 15-foot surge added to the 2-foot high wind-driven waves creates a storm tide of 17 feet. The mass of water, topped by battering waves, can travel miles and miles inland from the coast, submerging everything in its path. The combination of storm surge, battering waves, and high winds can be deadly as well as cause massive property damage.



Transportation at the Evacuation Assembly Area

When an evacuation is imminent, the safety of all Chatham County residents is of utmost importance. For those without transportation, help is available at the Evacuation Assembly Area (EAA). CEMA initiates evacuation operations at the local level utilizing all available resources to assure effective response. State assistance is supplementary to local activation of resources and is made available in response to local requests for assistance.

Activation of the EAA will be situation dependent, and contingent on the CEMA Director's recommendation and the approval of the Command Policy Group. Current planning calls for the Savannah Civic Center to be utilized as the primary EAA facility/location. Activating the EAA will require all scheduled events at the Civic Center to be postponed and/or cancelled, and the facilities prepared for EAA activities. As evacuation orders are considered, local ESF partners having responsibilities at the EAA will be notified and will meet to review procedures, determine or update resource requirements, identify possible issues, and resolve other shortcomings.

Evacuees may walk to the EAA, or be dropped off by family or friends however, it is anticipated that the majority of the Evacuees will arrive at the EAA utilizing Chatham Area Transit buses.

Upon arrival at the EAA, citizens will be directed to one of two designated Registration Areas. Passengers without pets will be directed into the Civic Center Arena. Passengers arriving at the EAA accompanied by pets will be directed to a sign-in area staffed and prepared to address pet issues. EAA staff will be available to answer questions and to help those passengers requiring assistance. Passengers with service animals will not be required to register their pets and may go through general check-in.

After completing the registration process, evacuees, pets and baggage will be loaded on school buses and trucks. Next stop is Augusta where they will be provided temporary housing. Once public safety issues within the County have been mitigated and the area is determined safe, the Chatham County Command Policy Group will call for the return of the area's population. Evacuees from Chatham County that utilized public transportation during the evacuation process will be afforded the opportunity to utilize public transportation to return to Chatham County.



Residents with Functional or Medical Needs Urged to Register with the Health Department



Persons with Functional and/or Medical Needs are encouraged to have plans for their evacuation. The Chatham County Public Health (CCPH) Department maintains a FMN registry, which is used to support individuals with functional and/or medical needs in an emergency. In a hurricane evacuation, this registry will be used for information and coordination purposes. It is important registrants understand relying on it for evacuation is a last resort and should only be used when there are no other alternatives available.

Individuals needing to register for assistance should contact the CCPH at 912-691-7443. Once the CCPH receives a completed application, they will screen the patient. When the screening is complete they will determine if the individual qualifies or not to be included on the registry. If they do not qualify the CCPH will recommend that the individual evacuate with the general population.

Each year, CEMA and the Chatham County Health Departments works together to a FMN Seminar to review roles and responsibilities within the FMN Evacuation Plan. This year the Seminar is on May 19th, 2016, and is a precursor to the full scale exercise that is planned for October 4th of this year.

Zika Virus: What You Need to Know

Spring is under way and as more people make their way outside for activities, Coastal Health District officials want to remind residents to take precautions to avoid mosquitoes. Mosquitoes and their itchy bites are annoying but they can also be dangerous since they carry diseases such as West Nile Virus, chikungunya, or Zika Virus. There are ongoing Zika outbreaks in nearly 40 countries and territories in the Americas, Caribbean, Pacific Islands and Mexico.

Zika virus is transmitted primarily through the bite of infected *Aedes* species mosquitoes, which can be found in Georgia. So far there are no reports of locally transmitted Zika cases in Georgia or anywhere in the United States, but cases have been reported in returning travelers. Zika virus is passed from an infected person to another mosquito through mosquito bites. An infected mosquito can then transmit the virus to other people. Sexual transmission of Zika has also been documented.

While most people who contract the Zika Virus may not even know they have it, there is a link between Zika and birth defects. The Centers for Disease Control and Prevention (CDC) is advising pregnant women not to travel to areas where Zika is circulating. If you are pregnant or trying to get pregnant and must travel to a Zika-affected, you should talk to your healthcare provider prior to travel.



Anyone traveling to an area where Zika Virus has spread should take the following precautions:

Wear long-sleeved shirts, long pants, and socks

- Use EPA-registered insect repellents containing DEET, picaridin, oil of lemon eucalyptus (OLE), or IR3535 (during travel and for three weeks after returning home)
- Use permethrin-treated clothing and gear (such as boots, pants, socks, and tents)
- Stay and sleep in screened-in or air-conditioned rooms or sleep under a mosquito net
- Upon returning home, individuals should continue to use EPA-registered insect repellents for three weeks and follow precautions to prevent additional mosquito bites.

Reducing the Mosquito Population in Georgia: It begins at home – both inside and outside.

Female mosquitoes lay several hundred eggs on the walls of water-filled containers - even a container as small as a bottle cap is a perfect breeding ground for mosquitoes. When water covers the eggs, they hatch and become adults in about a week to 10 days. A few infected mosquitoes can produce large outbreaks in a community and put families at risk of becoming sick.

- If you have things in and around your home and yard that could hold water, get rid of them! One of the most effective ways to control the mosquito population is to eliminate standing water. Dump out standing water in flowerpots and planters, children's toys, or trash containers. Do not allow water to accumulate in old tires, rain gutters, or piles of leaves or natural holes in vegetation. Tightly cover water storage containers (buckets, cisterns, rain barrels) so that mosquitoes cannot get inside to lay eggs. For containers without lids and too big to dump (bird baths, pools), use larvicides such as mosquito dunks or mosquito torpedoes (they will not hurt birds or animals).
- Trimming vegetation and cutting tall grass can help reduce the number of adult mosquito resting places. The Georgia Department of Public Health is encouraging all Georgians to use the first two weeks of April to clean up around their homes and yards.
- Adult mosquitoes live inside and outside so it's important to keep mosquitoes out of your home. Use screens on windows and doors, making sure they are in good repair and fit tightly. Use air conditioning when it's available. Mosquitoes are not strong fliers, so using fans on porches and patios can also help reduce mosquito exposure.
- It is important to use personal protection to avoid mosquito bites when engaging in outdoor activities. Wear lightweight long-sleeve shirts, long pants and socks. Using EPA-registered insect repellents containing 20%-30% DEET or a product such as oil of lemon eucalyptus will reduce exposure to mosquitoes.

Controlling the mosquito population will take all of us – working together as neighbors, united in a common cause – to prevent the spread of Zika virus in Georgia.

REMEMBER THE 5 "D'S" OF MOSQUITO CONTROL:

DUSK & DAWN:

**Avoid outdoor activity
when mosquitoes are
most actively feeding.**

DEET:

**Use personal repellents
containing this effective
ingredient.**

DRESS:

**Cover exposed skin and
avoid dressing in dark,
tight clothing.**

DRAIN:

**Dump standing water in
the yard weekly or after
a rain event.**

Gender Mainstreaming and Emergency Management

- By Vankita Brown, Dave Rowell & the NWS Gender Mainstreaming Working Group

Of those living in poverty in the United States, 55.6 percent of 45.3 million are female, according to a 2013 American Community Survey.

To build a Weather-Ready Nation, we must understand who our stakeholders are and how they use our products and services. Let's start with gender. The U.S. population is approximately equal: 50% male and female. Statistics show more men die than women each year due to almost all categories of weather. But women have unique weather-related vulnerabilities. Gender differences can directly cause inequalities and inadequacies in our ability to deal with the direct, indirect and longer-term effects of weather and climate-related hazards.

During high impact weather, such as heat waves, the elderly, of which the majority are female, is a group with one of the highest mortality rates. Women, on average, are also poorer than men, which may impact their ability to take protective actions against pending weather events. In our society, the primary care-giving role still largely rests with women. Women who are responsible for family care have limited time and often are overburdened, which can be a distraction from risk. Also, in attending to others in times of disaster, women often put family members first and themselves last.

Men still typically have the power to make decisions within households. There's a sense for many men that they are responsible for the welfare of others and should step in and take control in a crisis. The NWS and its partners must be cognizant of such factors and the many other ways gender can influence weather event outcomes for men vs. women.

When we talk about knowing our community, we have to know what's needed by whom, when and where. We need to know both vulnerabilities and capabilities. We must understand socially assigned gender roles, communication practices, social relations, risk behaviors and more. All of these factors affect how weather and climate information are accessed and assimilated.

For example, men have been found to be more risk prone, and women more risk aware. Before and during a disaster, we want people to be highly attuned to risk. We would like them to listen to us about the need to prepare, to get flood insurance, to evacuate, to take protective action. It is our responsibility to target and tailor our messages to make them effective, to offer equitable solutions to mitigate weather and climate impacts for both men and women.

The NWS is instilling Gender Mainstreaming into its Impact Based Decision Support services, and WRN program. Gender Mainstreaming involves assessing the different implications for women and men of planned policy action, program design and education. Our goal is to provide more responsive and sensitive weather, hydrological, climate and related environmental services to both men and women. To these ends, the NWS has established a Gender Mainstreaming Working Group to promote the concept within the organization as well as to consider ways in which the concept can be used to address external partner needs.



SARX 2016

On February 19, 20, and 21st, the CEMA Search and Rescue (SAR) Team headed to the woods of Washington, North Carolina to participate in an exercise involving numerous agencies from different areas. The CEMA SAR Team traveled the farthest for this event, and offered a great deal of expertise during the three day operation.

During this exercise, the CEMA SAR Team was able to test its ability to conduct a ground search over diverse terrain. The scenario laid out before the team was a group of three individuals that went camping, and did not return on the day they had told friends they would be. One of the missing campers was a known diabetic, posing a threat to life safety. Attempts to locate the missing camper's position by police tracking their cell phones were unsuccessful.

Search teams were sent out at approximately 6:00 PM in multiple areas to attempt to locate the missing camper's vehicle. After numerous hasty searches of different areas, the vehicle was finally located. Using this last known position, the CEMA SAR Team was called upon to conduct a man-tracking search for the victims. CEMA SAR Team member Art Peltier spearheaded this effort and put his skills on display by quickly picking up on their trail. An occasional foot print or cigarette butt was found along the way, providing a clue as to the potential whereabouts of the missing persons. The trail eventually turned cold once the team had tracked itself into a thicket/marshy area.

After hours searching in the cold wilderness of eastern North Carolina, the team called the command post for extraction back to the base camp. Once the team had arrived back at camp, a debriefing was held with the other search teams in the area to go over what evidence was found, as well as where it was found. The team called it a night at around 2:00 AM and headed to their tents after being out in the wilderness for several hours in 35 degree weather.



SARX is Continued on Page 10...

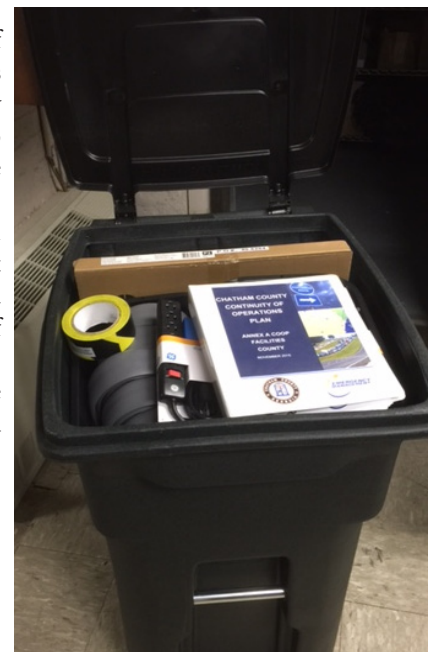
External COOP Facilities

Over the past year, Chatham County Departments have been working on their Continuity of Operations Plans (COOP). One very important element of these plans involves locating their operations to an alternate facility when their normal location is unavailable. CEMA has completed a plan to identify available government facilities that can be used inside Chatham County. The initial approach was to establish a list of four buildings that would allow departments to relocate if needed and provide all the necessary resources for each department to perform their mission essential functions.

The next phase is looking for facilities beyond Chatham County, in Effingham and Bulloch Counties. The COOP team recently toured two sites that could provide Team Chatham a government administrative facility where the most critical mission essential functions would continue if there is a mandatory evacuation. Both sites will meet basic needs when COOP kits are deployed. The final phase of planning is to travel to Augusta-Richmond County in April to tour four potential locations.

Each Push Package is designed to support up to ten Team Members at a COOP Facility. With the three COOP Kits, basic administrative supplies and technology will allow up to 30 people to get started working on short notice. Contents include:

- | | | |
|--------------------|-----------------------|------------------|
| • Printer Paper | • Tape and Dispensers | • Phones |
| • Trash Cans | • Scissors | • File Cabinet |
| • Legal Pads | • Binder | • Printer w/ Ink |
| • Pens and Pencils | • Paper Clips | • Workstations |
| • Index Cards | • Rulers | • Tables |
| • Post-Its | • Clipboards | • Chairs |
| • Highlighters | • Calculators | |
| • Markers | • Rubber Bands | |
| • Extension Cords | • Dry Erase Board | |
| • Power Strips | • Three Hole Punch | |
| • File Folders | • Radio | |



SARX 2016 Continued

A quick four hour nap was all that was had before the team was getting geared up again for the next operational period. After a quick meal was provided by the Salvation Army, the team went back to the thicket to see if they could pick up on the trail that had went cold just a few hours earlier. The team fanned out from the last known point on the trail in search of clues, hoping to pick up on a piece of evidence that would lead them to the missing campers. Several more hours had passed by as the team swept the area, finding faint clues every now and then, but no solid leads were found.

Just as hope was beginning to fade, another search team had radioed in claiming they had found a syringe. This was a crucial piece of evidence in an attempt to locate the missing diabetic camper. The CEMA SAR Team, as well as the other search teams headed to that location in an attempt to pick up on the trail from that syringe. Footprints were found headed back into the woods, so the search teams lined up to perform a grid search. The teams moved together as a solid unit – approximately 20 searchers spaced approximately 20 feet apart all standing in line with each other started sweeping the area looking for more clues of the missing campers.

After about 30 minutes of conducting the grid search, a campsite was found. Food, shelter, and equipment was found at the site, however the missing campers were not there. Once again, the CEMA SAR Team's man tracking abilities were put on display, picking up the trail from the campsite in an attempt to locate the missing campers. After zig-zagging all through the woods, the trail again went cold by a stream. The search was called off by command. The exhausted search teams were extracted back to the base camp and a mission debrief was conducted.

During the debriefing, it was revealed that the CEMA SAR Team got within 30 feet of the missing campers on the first night of the search. However, the flaw with the scenario was that the missing campers were not trying to be found. While conducting the searches, teams were constantly calling out the names of the missing campers. Had the campers been trying to be found, the CEMA SAR Team would have found them in a matter of hours.

With that knowledge in hand, the team was able to rest easy that night. The team then conducted its own debriefing discussing lessons learned throughout the two days in the wilderness. Many valuable lessons were learned regarding integrating our local search procedures with teams from different areas. All of the valuable lessons learned will be passed on to other CEMA SAR Team members that were not able to make the journey.



A special thanks to Gary Hom, Art Peltier, Doug Rowland and Charlie Maynard for taking the time to travel to North Carolina to participate in the exercise.

Protecting Our Most Vulnerable



On March 31, 2016 Chatham Emergency Management Agency met with staff members from local Long-Term Care Facilities (LTCF) to discuss plans for the 2016 Hurricane Season. At the meeting, CEMA Staff stressed the importance of reviewing and/or updating annual evacuation procedures and all LTCFs received information regarding Georgia's Hurricane Evacuation Preparation Memorandum of Agreement (MOA). The MOA, if signed by the LTCF, will serve as a secondary option for transportation in the event of a hurricane evacuation should the LTCF's primary mode of transportation fail. By signing the MOA, Georgia will work to provide ambulances, para-transport vehicles and coach buses for the facility. These vehicles will transport the residents to the facility's designated evacuation destination. CEMA has worked closely with the LTCFs of Chatham County to make sure each facility understands the importance of having a secondary transportation plan. Two weeks after the April meeting, CEMA set up a mock

evacuation to exercise how procedures would be handled in a live occurrence. A call-in line was created for each LTCF to give CEMA information needed to evacuate that particular facility. It's important to regularly update how many patients each facility has and how each patient would be evacuating, i.e. ambulance, charter bus or van, in the event of a real emergency. The Hurricane Evacuation Preparation MOA is a lifesaving service that costs nothing until services are actually needed.

Storm Damage from a Bird's Eye View

- By Ron Morales

For the past year, the NWS Eastern Region has had a team exploring the feasibility of using unmanned aerial vehicles (UAVs), or drones, to assist with rapid response storm damage surveys. This small team is comprised of WCM Ron Morales, NWS Charleston, SC, and Forecaster Mike Sporer, NWS Blacksburg, VA. The initial goal was to find out whether it would be feasible for individual Weather Forecast Offices (WFO) to purchase and operate their own UAVs. After several in depth discussions and remote meetings with the NOAA Unmanned Aircraft Systems Program Office, it was clear that this option was not the way for WFOs to go due to liability, budget, training and sustainability issues. The team then turned its focus toward other viable solutions for obtaining UAS/drone data to assist with storm damage surveys through local county EM teams and the FAA UAS Test Sites. Through these options, the two WFOs were able to obtain data without cost, liability or training issues for local NWS offices. The unmanned systems data was obtained on a royalty free basis without data restrictions, operational control of or responsibility for the platform, a principle-agent relationship, liability, or any waiver or immunity from compliance with applicable laws including FAA regulations.

Last fall, Sporer successfully conducted a storm spotting training session in conjunction with the UAS operators associated with the FAA's Virginia UAS Test Site. This event connected qualified UAS operators willing to share aerial imagery with the NWS and provided an opportunity for both NWS and Virginia UAS Test Site personnel to stress the importance of safe and responsible UAS operations. Any WFO can easily adapt this line of communication and concept for obtaining volunteered data of opportunity, which does the following:

- Highlights NWS's need for aerial imagery for storm damage
- Connects UAS Operators with the FAA's Know B4UFLY training and application
- Details the types of damage that may be caused by various severe weather phenomena, what that damage may look like from an aerial perspective, and how this information can greatly benefit NWS storm damage survey efforts
- Offers specifics on how data can be shared with the NWS

In a parallel effort, through local EM relationships, NWS Charleston, SC, was able to acquire airborne imagery from UAS by tapping into the rapidly growing community of commercial UAS operators that have a special waiver with the FAA to legally fly their small UAVs (less than 55 lbs.). This waiver is called a Section 333, (FAA Modernization and Reform Act of 2012, Public Law 112-95 FEB. 14, 2012, Section 333).

At the time of this article, there were more than 4,400 operators across the country with a Section 333 waiver. The EM responsible for the Charleston, SC, region hired a local UAS imaging company with a Section 333 to conduct an aerial survey following a severe storm event. The EM shared the UAS imagery with the NWS Charleston and other county partners. NWS Charleston was able to use this aerial video and high-resolution imagery to determine the severe storm event was a F-1 tornado. Thus, the EM partnership facilitated a post-storm damage assessment of a tornadic event within a county warning area at no charge to NOAA/NWS. This is an innovative data acquisition strategy supporting NOAA's Weather-Ready Nation.



Example of aerial imagery provided by local Section 333 UAS/drone Operators. Tornado damage from February 25, 2016 in Appomattox County, VA.



Drone video of Pensacola tornado damage from Feb. 23, 2016 by Josh Oldshue.

After the Storm: Levels of Re-Entry

Following the mandatory evacuation of Chatham County, the next major initiative is to get things back to normal operations. The Chatham County Command Policy Group will make the determination following a partial or full evacuation of the County, as to when conditions in the affected area(s) allow for citizens to return home. The affected area may be limited in size; could include all Chatham County; or possibly extend into several counties in the region. When announced, a progressive, four-phase plan will be initiated to ensure an orderly re-entry into the affected areas of Chatham County.

Re-entry during Phase I is restricted to emergency responders, designated critical workforce personnel, and other personnel responsible for protecting and restoring critical municipal, county, state, and federal government infrastructure. Be prepared to work up to 16-hour shifts and ready to return to work as soon as possible. If an employee is not working as a critical employee, they should be prepared to do any type of work that is appropriate in an emergency situation. This duty may not be related to their regular work assignment.

Phase IIA will likely consist of personnel conducting life safety operations such as search and rescue, emergency medical services, fire suppression; hazardous materials control and containment, preliminary damage assessment, essential relief staff to critical medical facilities and immediate utility restoration to critical incident facilities. First responders and other designated emergency response personnel re-entering during Phase IIA must be in possession of an official Local, State, or Federal Government/Department Photo ID Card.

Re-entry into Chatham County during Phases I and IIA will be restricted to first responders and other designated emergency response personnel to include but not limited to law enforcement, fire services, search and rescue resources, emergency medical services, or government officials. Phase IIB should consist primarily of those individuals from the public and private sector that support the re-establishment of critical infrastructure to support the re-entry of the general public. These critical infrastructure systems include but are not limited to petroleum and food distributors, non-emergency medical facilities such as dialysis centers, pharmaceutical providers, members of the media, medical facility support staff and local government essential workers.

Phase III includes all residents, property owners and business owners. Local public safety officials will likely ask those attempting to gain access to show a valid state issued identification card as well as some type of document or proof that they have a reason or interest to enter the impacted area. Phase IV or final phase of re-entry in which local officials may determine all or portions of their county are relatively safe for the general public to enter. No Special ID Requirements.

A copy of CEMA's phased re-entry guidelines can be found on our website under the "Business Planning" section under the "Prepare Now" tab. If you have any questions, give us a call at 912-201-4500 or email CEMA@chathamcounty.org.

Portable Communication Technology



Chatham County was recently awarded grant funding to purchase portable communication satellite technology. After researching available technology and talking with State and Federal partners, the Iridium Satellite system was chosen to be purchased so that the phones and devices would be compatible with State and Federal agencies. The grant allowed the County to purchase five Iridium 9575 Extreme Kits with an Iridium AxxessPoint wifi adapter for each kit and five Nal Nano Shouts. The Iridium phones and AxxessPoint wifi will allow one phone call and five wireless devices to connect to the internet during a disaster. With the purchase of five kits, this expands the disaster communications for the Emergency Operations Center, Public Safety, Public Works, Damage Assessment or Search and Rescue staff to have up to five phone calls and 25 wireless devices have access to the outside world.

The grant also allows the County to purchase five Nal Nano Shout is a great compact personnel tracking devices. This pocket size device allows two-way messaging either by SMS messages, email or GeoPro addresses. The device can alert audibly as well as visually. With the ability to help track users in the

field carrying them, the Incident Command and/or Unified Command can visually see on a web page the location of the user. The GeoPro network is an add-on service that will be researched once the devices have been purchased and field tested. Besides the messages displayed on the color LCD screen, it easily displays GPS lat and long coordinates and has a lithium-ion battery that allows the Shout Nano to post up to 1200 position reports.

Four years of prepaid "airtime" was purchased to allow monthly training with the devices to ensure that they will be operational when needed. This airtime was formulated to allow quick phone calls from each satellite phone, one or two messages sent on the Shout Nanos and a connection to the internet on the AccessPoint Wifi Hotspots.

Setting Rules for Donations Management



Spontaneous unsolicited goods are expensive and time consuming to sort. In a disaster, cash donations often help the most.

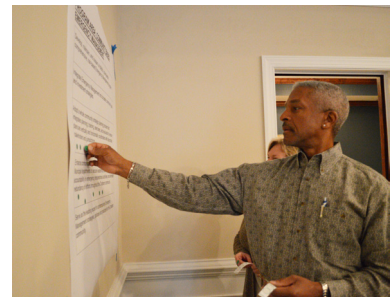
CEMA is in the process of formalizing a Volunteer and Donations Management Plan for 2016. History has shown that when there is no process to accept donations, the resources sadly go to waste. Building off those lessons learned, CEMA is working with Sharyn Baggett and John Wright, who are both retired from the American Red Cross and experts in donations management. This plan will take us through the process of opening up a donations center, accepting donations and cash, handling the logistics of managing the donations, and eventually closing down the donations center.

In the wake of an emergency it is important for people to get involved and help their fellow citizens in this time of need. The outpouring of generosity and kindness of people around the country will do a lot to help our community heal from the tragic consequences of this disaster. However, it is important to first do some research to find out what is needed and coordinate with experienced disaster relief organizations to make sure your contributions go as far as they can. Here are some things to consider:

- 1. Financial contributions are often the best donation to make.** Providing a financial contribution to a voluntary organization involved in disaster activities is often the most sensible and the most efficient way of helping the people in need. There are many voluntary organizations with considerable experience in disaster relief. When the public supports these organizations with financial contributions, it helps ensure a steady flow of critical services to the people in need after a disaster. Please visit www.ChathamEmergency.org for a list of the major disaster relief organizations involved in preparedness, prevention, response and recovery in our community. To learn more about disaster relief organizations involved in national disasters please visit www.nvoad.org.
- 2. Used clothing is rarely a useful item to collect for disaster relief.** Used clothing is often hard to clean, sort, pack, transport, store, and distribute. Mounds of clothing take up valuable warehouse space and frequently end up being discarded. Constructive things to do with used clothing are to have a yard-sale to raise money for the disaster relief organizations that provide goods and services that are needed by the survivors.
- 3. Confirm what is needed before taking action.** The most effective way the public can assist is to support the experienced disaster relief organizations with either financial contributions or in-kind goods and services that the organizations report are needed. Many experienced organizations involved in disaster relief have toll-free numbers staffed with operators who can provide information about which donated goods are needed in the disaster area. It is often a mistake to assume what is needed in a disaster. Donors should be wary of anyone who claims that “everything is needed” in a disaster. Get precise information before collecting any donated goods.
- 4. Donate through a registered organization.** It is never a good idea to collect goods for disaster relief without a firm plan in place that confirms the goods are needed, who will receive the goods, how the goods will be transported and how they will be distributed. During a disaster, experienced disaster relief organizations base their activities on detailed needs assessments. Coordination with a relief group is essential to ensure the right goods are collected, the right amount is collected, and that logistics issues such as transportation, warehousing, and distribution are fully discussed. Donors will find that it is often most practical to focus on one or two items that an organization needs rather than collect a variety of items.
- 5. Transportation must be planned in advance.** Transportation is frequently a major problem for donors and relief operations. It must be organized in advance; otherwise, a donor can easily be stuck with large amounts of donated goods and no means of transporting it to the recipient organization. Do not assume unsolicited relief supplies will be transported free (i.e. fuel is not free) or at government expense. The donor has the primary responsibility to find transportation for the goods they are donating. Local trucking firms may be willing to help in times of disaster, if funds are available to cover part of the expense. Donors often raise money to help pay transportation costs.
- 6. Donated goods must be well packed and labeled.** After confirming that the goods are needed and there is a plan to receive, store and distribute them - the receiving organization will give you instructions about how the goods should be sorted, packaged and labeled. If unsure of this process, discuss these steps with an experienced disaster relief organization.

To learn more about donations, please visit our website at www.ChathamEmergency.org.

Emergency Management Program Advisory Committee



Inclusion and increased participation is a primary focus for the Chatham Emergency Management Agency (CEMA) and continues to be our driving force to ensure we are prepared for any disaster. We recognize that the best way to accomplish this is through partnership and collaboration with community members and local leaders.

As we welcomed 2016, we launched the new Emergency Management Program Advisory Committee (EMPAC) which is made up of municipal City Managers, Administrators, Senior County Leadership, and members of the media, and will serve as the implementation arm of Whole Community Emergency Management. Because feedback is valued, Advisory Committee members will analyze CEMA's emergency management initiatives and evaluate our effectiveness in emergency preparedness, response, recovery and mitigation efforts. The purpose of the Advisory Committee is to offer an opportunity for partners to help mold the future of the program and have ownership and a voice within the emergency management.

We are happy to report that the initiative has been met with great participation and enthusiasm. The inaugural Advisory Committee meeting was held January 7th at Crosswinds Golf Club and drew nearly 100 partners. The room was lined with sheets of paper, each one listing 5 goals that related to disaster mitigation, response, recovery, community outreach, and preparedness. Each attendee received seven stickers to place on the areas they believed to be most important. From this exercise, we learned our partners are happy with the changes made within the program up to this point, communication has amplified and they are happy with the increased accessibility and availability when critical information is needed.

On the other side, we received sweeping comments regarding the need for training and exercise opportunities for all levels of government. We also learned from partners that clarification is needed on what their roles and responsibilities are within a disaster. After all points and comments were collected and totaled, with a "5" being the highest, CEMA was given a rating of 4.15 or (A-) for the third and fourth quarter of 2015. Most would be happy for a ranking such as this, but more work needs to be done.

On April 7th, the second EMPAC meeting was held at the Mighty 8th where attendees were presented with the results of the previous exercise and were briefed on the updates CEMA has made to the program based on their feedback. From there, each table was given a list of the 35 objectives that they identified from the last meeting and were asked to rank them based on importance. The results show a slight improvement from the last report card with an increased score of .10.

While the improvements are gradual, this shows that the EMPAC is working and our partners' needs and concerns are being addressed. Continued communication and collaboration is necessary for the growth of Chatham County's Community Emergency Management Program. We know that steady development leads to sustainable results. We would like to thank those who have given their time to assist in this effort and continue to work to better our community. We cannot do it alone.



To view the latest report card, please see page 26. The next EMPAC meeting will take place July 7th. For more information, contact Dennis Jones at dtjones@chathamcounty.org.

Operational Conditions (OPCONs)

Operating Conditions or OPCONs, summarize the major actions that are taken to prepare for and respond to a tropical cyclone. The OPCON structure uses timelines that are based on the arrival of 39 mph tropical storm force winds; not the arrival of the hurricane's center which is officially referred to as landfall. OPCONs progress through hurricane operations, from day-to-day monitoring and preparedness (OPCON 5), through the direct impact of a tropical cyclone (OPCON 1).

OPCON 5 – Normal Operations (Preparedness Phase)

OPCON 5 is the routine operating level during hurricane season when there is no direct threat from a tropical cyclone. Typical actions include reviewing and updating operational plans, developing Standard Operating Procedures (SOPs), and conducting training, exercises, public outreach and education. Regular monitoring of the Atlantic Basin is conducted for tropical systems that may threaten coastal Georgia. When a threat is identified Emergency Management partners work collectively to accomplish responsibilities identified in the CEMA Emergency Operations Plan.

OPCON 4 – Monitoring and Potential Impact within 120 Hours (Limited EOC Activation; Minimal Staff)

OPCON 4 is an advanced stage of readiness. This condition is qualified by the possible impact of a tropical cyclone within five days or 120 hours as represented graphically by the National Hurricane Center forecast track error cone. This condition is initiated when Chatham County has the potential to be threatened by direct or indirect effects of a tropical cyclone. Indirect threats typically involve the influx of evacuees from a threatened state while direct threats refer to the arrival of tropical cyclone related hazards such as storm surge, wind, tornadoes, and torrential rain. During OPCON 4 the EOC will undergo a limited activation with minimal staff; threat information will be disseminated to disaster partners and regional conference calls will be held with EMAs in threatened areas and/or neighboring states. Preparedness efforts will be coordinated with GEMA, NHC, NWS and other local EMAs. Other notable CEMA activities during the 120-72 hour time frame:

- Creating a schedule of events for meetings and conference calls
- Drafting the Executive Order request for the Chairman to sign and send to the Governor
- Tracking finances in regards to the incident for reimbursement purposes
- Tracking special population numbers to determine transportation needs in case of an evacuation
- Determining who is needed in case of an Emergency Operations Center (EOC) activation
- Determining possible staging area locations

OPCON 3 – Watch/Warning - Potential Impact within 72 Hours (Partial EOC Activation; Relevant Staff)

OPCON 3 is the significant elevation of the threat posed by a tropical cyclone. During this condition, tropical cyclone-related hazards are forecast to directly impact Chatham within 72 hours. During OPCON 3, the EOC will be partially activated with relevant staffing. Other notable CEMA activities during the 72-48 hour timeframe:

- Elevates EOC to a Level 2 activation
- Reviews Emergency Operations Plan (EOP) and completes Declaration
- Continues conference calls with CPG and local partners
- Begins preliminary discussions regarding evacuations and other issues
- State request for Declaration is received
- Begins operating the Joint Information Center (JIC)
- Conducts pre-mobilization meetings
- Receives assistance requests for transportation, sheltering and the Evacuation Assembly Area (EAA)
- Determines sheltering needs
- Critical Workforce (CWF) shelters activated
- Communicates with special populations to determine evacuation needs
- Works with jails and prisons to initiate evacuation procedures
- Begins readying the ASOC
- Starts post-planning: determines re-entry strike teams, debris cleaning, pod locations, CWF needs, general population commodities and re-entry checkpoints



OPCONs continued on page 17...

Public Assistance Program: Categories of Work Fact Sheet

Emergency Work



A. Debris Clearance

Category A: Debris Clearance

Work to clear public roads, including the right away, public improved property, and damaged materials placed on roadside for pickup. If the debris removal is completed quickly and you have a FEMA-approved debris removal plan in place, you have an opportunity to receive additional funding under the new alternative procedures for debris removal.



B. Protective Measures

Category B: Protective Measures

Actions taken to protect lives and property, which accounts for providing safety barricades, signs, area security. It also includes actions such as sandbagging efforts. Overtime for force account employees, both regular and overtime for temporary hires are eligible, along with equipment and materials.



C. Roads & Bridges

Category C: Roads & Bridges

Work to repair eligible roads, bridges, and associated features, such as shoulders, ditches, culverts, lighting and signs that are under the jurisdiction of a disaster-affected town, village, city, county, tribal organization, or private non-profit. Most projects cover costs to repair facilities to pre-disaster function and design; however, it is an opportunity to upsize a culvert or install a bridge for a repetitively damaged facility!



D. Water Control Facilities

Category D: Water Control Facilities

Work to repair drainage channels and pumping facilities that are under the jurisdiction of an eligible disaster-affected town, village, city, county, tribal organization, or private non-profit organization.



E. Buildings & Equipment

Category E: Buildings and Equipment

Work to repair or replace buildings, including their contents and systems, heavy equipment and vehicles that are under the jurisdiction of an eligible disaster-affected town, village, city, county, tribal organization, or private non-profit organization.



F. Utilities

Category F: Utilities

Work to repair water treatment and delivery systems, power generation facilities, power distribution facilities, sewage collection and treatment facilities, and communications facilities that are under the jurisdiction of an eligible disaster-affected town, village, city, county, tribal organization, or private non-profit organization.



G. Other

Category G: Parks, Recreational Facilities, and Other Facilities

Repair and restoration of parks, playgrounds, pools, cemeteries, mass transit facilities and beaches that are under the jurisdiction of an eligible disaster-affected town, village, city, county, tribal organization, or private non-profit organization. Other work that cannot be characterized adequately by Categories A through F.

Permanent Work

OPCONs Continued...

OPCON 2- Evacuation- Potential Impact within 48 Hours (Full EOC Activation)

OPCON 2 is the operational level where multilateral protective actions are initiated. During this condition, actions are taken to support both inter-state and intra-state evacuations in preparation of the direct impact from a tropical cyclone. During OPCON 2, the EOC will be fully activated with necessary staffing; coordination of information from ESFs and to the EOC will be accomplished through each Primary Agency. Other notable CEMA activities during the 48-24 hour time frame:

- Protecting critical facilities
- Operating at a full EOC activation
- Coordinating with the EAA
- Coordinating evacuation transportation
- Begins to staff traffic checkpoints
- Continues conference calls with the CPG and local partners
- At H-36 general population evacuations begin
- National Weather Service issues local hurricane statements
- DA Team begins post-landfall planning
- Joint Field Office (JFO) planning set-up
- HazMat issues are determined
- Possible debris issues are reviewed
- Post-event planning efforts are continued

OPCON 1- Potential Impact within 24 Hours

OPCON 1 is the most elevated level of operational preparedness. During this condition protective action is taken in anticipation of the direct impact from a tropical cyclone. Other notable CEMA activities during the 48-24 hour time frame:

- Mobilization of assets to evacuation sites
- Closure of bridges to waterway traffic
- Ongoing media coordination
- Continues communications with GEMA
- Determination of population refusing to evacuate
- Continuation of post-event planning

**Be Prepared
w/Chatham EMA!**

**Download our app
Today!**

Search: ChathamEMA



Critical Workforce Sheltering

A Critical Workforce Shelter (CWFS) is designed as location for emergency management partners to seek shelter from the impacts of a hurricane threat. A CWFS is not designed to provide comfort items and will have limited to no capabilities. CWFS locations are strategically located in and out of County for a scalable and dynamic sheltering program.

A CWFS is reserved for emergency management partners and as such, the general public is not considered part of this population. Basic human services will be provide, however, it is the responsibility of the partner to prepare themselves and bring the **essential personal items** identified below.

- Contact information for critical staff members
- Relevant plans, procedures, guides, etc.
- Change of Clothing for 10 days
- Bed roll and/or sleeping mat
- Pillow and blanket
- Folding chair or stool
- Flashlight or glow sticks
- Backpack or Sling Bag
- Trash bag for dirty or wet clothes
- Driver's license
- Special diet food
- Water Bottle
- Eyeglasses (Prescription and Sun)
- Medications (for 10 days)
- Personal first aid kit

Personal Hygiene Items:

- Toothbrush, Toothpaste
- Razors, Shaving Cream
- Towel, Bar Soap
- Shampoo, Conditioner
- Deodorant

Recommended Comfort Items:

- Personal electronic devices with earphones such as radios, MP3 player, ipod, etc.
- Batteries for personal electronic devices, charging may be limited due to power outages
- Electronic Readers, Books or magazines
- Shower shoes or flip flops
- Snack foods
- Hat(s)
- Sunscreen
- Bug spray
- Eye mask
- Ear plugs

Presenting: The First Chatham Animal Response Team

When an evacuation order is issued, the Evacuation Assembly Area (EAA) will be activated to assist members of the public and their pets who do not have reliable transportation out of town. Appropriate staffing at the pet evacuation area has always been a major concern in regards to pet check in procedures, registration, vaccination and loading. Animal Control and the Humane Society both are responsible for evacuating their own shelters and simply will not have enough staff to assist with pet evacuations of the general public at the EAA. This year, we decided to do something about it.

We are proud to announce the First graduating class of the Chatham Animal Response Team, the first of its kind in the state. Together, the group has completed approximately 1,000 hours of training to become the first deployable volunteer team in the state of Georgia. This victory would not be possible without the help of the Florida State Animal Response Coalition.

As the first and only animal response group to have plans approved by FEMA, the Florida SARC members are truly leading subject matter experts. They traveled to Savannah for three weekend sessions to train Chatham County citizens on all-hazard disaster preparation, planning, training, response, recovery and sheltering during animal emergencies. The training consists of three levels: Introduction, Advanced and Train the Trainer. Of the original group, 30 are approved to deploy, 18 advanced to incident managers and 12 are approved for training future volunteers. To help CART members gain experience, they are encouraged to volunteer with area shelters and rescue organizations.

Now, when a hurricane, fire, tornado or other disaster threatens our area, the Chatham Animal Response Team (CART) will be there to assist the animals that rely on us. CART is organized under Chatham Emergency Management and utilizes the principles of The Incident Command System (ICS). Thanks to Florida SARC, our volunteers are now able to not only exercise pet emergency response, some have become certified trainers and have the ability to train other teams throughout Georgia. Congratulations volunteers! We are thankful for your service and commitment to the pet community!



Chatham Animal Response Team Members:

Bert Adams
Wanda Bello
Randall Boger
Katherine Cohen
Selaah Dalacos
Lisa Demarco
Colin Elgood
Sonia Geiss
Rhonda Hatmaker
David Hayes

Julie Holmes-Taylor
Melissa Kendrick
Shelly LaMonica
Janet Langford
Kimberly Lanier
Meredith Ley
Gerlad Rewis
Larry Rountree
Seth Sawyer
Lisa Scarbrough

Carolyn Silvestro
Will Sims
Harriett Singleton
Barbara Stuck
Thomas Stuck
Don Sullens
Jennifer Taylor
Vivian Whittal
Neeki Williams

CEMA Would Like To Recognize the Following Florida SARC Members:

Jim Aiello

Anna Ellis

Andy Bass

Consie von Gontard

Individual Assistance Program: Damage Assessment

Changes are coming to CEMA's Individual Assistance - Damage Assessment Program (IA-DA). After a large scale event, it is imperative that CEMA is able to rapidly assess the size and scope of the impact on the community to determine if Chatham County may be eligible for Federal Assistance. FEMA has updated their Damage Assessment Operations Manual in April, 2016. This has then required CEMA to tweak our plan to clearly outline the national standards that are used in the local process. By doing so, this will promote accuracy, consistency and efficiency.

CEMA's IA-DA Guide is being written with an understanding that the goals of accuracy, consistency and efficiency cannot be accomplished unless the entire emergency management team is engaged and empowered. By outlining the specific damage and impact information required to support a request for Federal assistance and explaining how that information is evaluated, the guide will empower Chatham County to be able to rapidly ascertain if we would be eligible for assistance. Additionally, the guide will include job-aids for training and execution of the IA-DA process for field response personnel. This multi-faceted team-based approach is intended to support the rapid development of information needed by leadership to request a Major Disaster Declaration from the President.

Not every incident will require detailed information beyond what is available through general monitoring. As an example, minimal damage that commonly results from rainstorms may not need any further assessment, because supplemental assistance likely will not be necessary. If, however, it is determined that more in-depth information is needed, jurisdictions will coordinate with CEMA to discuss the type of assessment that is needed, timelines, and coordinate damage reporting.

Field assessments conducted by DA Team members are focused on capturing damage information for impacted households and assigning each household into one of four separate categories: affected, minor, major or destroyed. After teams' survey affected areas, the teams will then provide a field command post with completed Preliminary Damage Assessment Sheets and photos of affected properties. This information will then be sent to the Emergency Operations Center to begin mapping the extent of damage, as well as estimate the dollar value of the damage by referencing the Tax Assessor Database, and applying a damage formula. Once the DA Teams have completed their assessments, the information collected will be provided to the State Government.

Once Georgia Emergency Management Homeland Security Agency receives and verifies the information submitted by CEMA is complete and consistent with programmatic assessment criteria outlined by FEMA, a Joint Preliminary Damage Assessment (Joint PDA) will be requested. In the event of a Presidentially Declared Disaster, FEMA Individual Assistance programs can provide assistance to support the recovery of disaster survivors who have uninsured or under insured necessary expenses and serious needs. This may include assistance for temporary housing and housing repairs, critical disaster related expenses, and the replacement of essential personal property.



On November 5, 2015, Damage Assessment Team members from across Chatham County participated in a full scale damage assessment exercise. Using a severe weather event scenario, teams walked through simulated damaged neighborhoods, collecting information provided on visual and informational training aids posted on the right of ways.

Write It in Lights

Thanks to the Special Local Option Sales Tax, The Chatham County Department of Engineering acquired three changeable message boards for use throughout the County. The signs were needed to improve safety within construction zones for County managed projects, but also can be deployed and updated during an emergency or evacuation event. Whether the emergency is large or small, on site messaging is critical. The units feature quick message selection, password protections, independent module operation and super bright LED technology. The units will be housed at Mosquito Control and deployed by DOE staff. Local partners are able to request use of the units, just contact the DOE office and they will arrange delivery to the site. Use of the signs will be prioritized based on the type and magnitude of event and will be ready for deployment in April of 2016. To request, contact Nathaniel Panther at NPanther@chathamcounty.org.



Safety and Risk Management - By Nathan Benson



Office of Occupational Safety & Risk Management: Greg Scott, Nathan Benson, Leigh Herald, James Aberson

Within Chatham County Government, we taking a proactive approach to ensure the safety of our team members. In 2015, the Chatham County Occupational Safety and Risk Management department was created to provide a synergy of efforts among several existing county positions. Within this department falls a team that is committed to being a partner in safety management by providing Team Chatham with an exemplary workplace that is safety conscious and injury free. Our team is made up of professionals with backgrounds in occupational safety, insurance, training and the Americans with Disabilities Act. The team's experience allows them to focus on continually advancing the vision of a safe and injury free workplace through active engagement of our mission. Our mission includes: Ensuring safety concerns are heard, understood and addressed. Providing and supporting training that is used as a catalyst for continuous improvement. Returning employees to work efficiently and effectively. Continually measuring, evaluating, and improving our safety and risk management culture.

Safety is a value that is ingrained into all emergency management operations. We are proud of our forged partnership and ability to intertwine our missions to ensure the safety of employees and CEMA volunteers. In fact, CEMA and Occupational Safety and Risk Management are often working side by side. Whether it is exercise planning, site visits, advisory committee meetings, volunteer meetings or occupational safety activities you can be assured that a multidisciplinary team of professionals is ready and willing to answer the call.

Over the coming months, we look forward to expanding the training offerings available to CEMA volunteers through the Occupational Safety and Risk Management department. From CPR, AED, Bloodborne Pathogens training, Driver Training, Fire Extinguisher training and other industry leading safety training opportunities.

In emergency management, error prone situations are abundant. Taking the time to critically analyze the task at hand can be the difference between success and failure. The S.T.A.R. principal is an effective tool used to manage human performance to help ensure your safety and compliance with legal requirements. This self-checking principal allows us to look for those error prone situations prior to commencing work.

When Worlds Collide



As we enter into another hurricane season, it's important for partners and ESFs to get together to discuss roles, responsibilities and expectations for the following months. ESF meetings are common this time of year, but it isn't often to have the entire public information and media community in one place- to work together- voluntarily. This is exactly what happened on May 5th when CEMA hosted its first ESF-15 Media and Public Affairs Pre-hurricane Season Summit. It might seem like a no-brainer, but all too often relationships between media and public information offices are strained. But when everything starts to fall apart, or a community is hit hard by a disaster, coordinated and timely communication is critical to effectively help the community. Effective and accurate communication can save lives and property, and helps ensure credibility and public trust.

Turn over is inevitable in our media market. Reporters come and go for better opportunities and public affairs personnel bounce around from agency to agency. With so many changes occurring over the last year, the Summit was the perfect opportunity to re-familiarize with each other and strengthen relationships. In an effort of transparency, CEMA discussed hurricane and evacuation time lines, preparedness campaigns, and the role of the Joint Information System during an event.

New this year is the passage of Georgia Senate Bill 381, otherwise known as the "First Informers Broadcast Act." It stemmed from a nationwide push by the National Association of Broadcasters and their state affiliated organizations to be recognized as key players in the distribution of Emergency Alert System messages and to ensure access to facilities and equipment necessary to distribute critical public information. In the last three years about a dozen states have either passed or are considering legislation similar to what just passed in Georgia.

The law came about following incidents during Hurricane Katrina in Louisiana and Mississippi when broadcast outlets had fuel or other resources diverted by law enforcement during the early chaos of the disaster. A couple of years later, the Mississippi River flooded in Nashville, Tennessee and a television station adjacent to the river was sealed off to the station manager and engineers, even though the actual flooding was the back of the parking lot. The First Informers Broadcast Act grants access to areas affected by an emergency to restore, repair or resupply a facility/equipment to produce or transmit emergency related programming. That can include transmitters or generators. Media should also, if feasible, have access to resources such as fuel, food, water and other supplies necessary for producing or broadcasting a signal and not have materials seized.

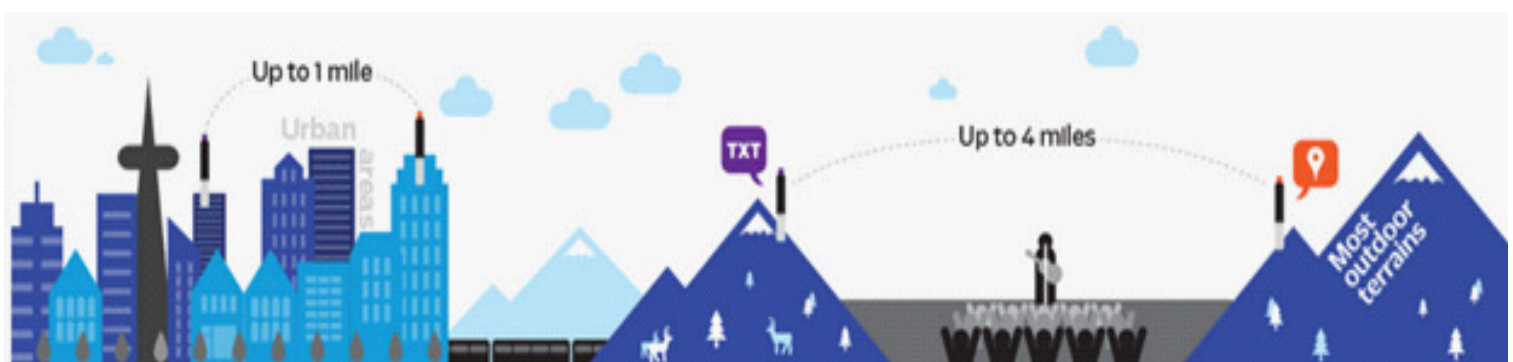
The Georgia Emergency Operations Plan has been reviewed to reflect the new law, but went a step further to include public information, radio and print/online media. In the Hurricane Annex which discusses Phased Re-Entry, there were no changes because media is already identified under Phase IIB, allowing the entrance of those from the private sector to support the re-establishment of critical infrastructure systems. Under this law re-entry passes are no longer needed, however that does not give media carte blanche access into disaster areas.

The summit allowed for honest and open dialogue regarding sheltering, evacuation terminology and rumor control, and all parties left with a sense of progress. While there is now a long list of concerns and "to do" items, there was a collective agreement for everyone to work together to find solutions. The group will meet again in the following months to work out a plan for press pool coverage during an event and the possibility of media sheltering along with critical workforce staff. Having these types of discussions now, saves precious time during an event.

Text and GPS, Even Without Service



Emergency Support Function 2 – Communications is testing out a new compact and lightweight technology called GoTenna that sends messages and shares your GPS location between other GoTenna users both individual, groups or anybody using a GoTenna. This device can be used with or without cellular service but was designed for “No Service” situations. There is a basic setup to this device before it can be used. A smartphone application must be downloaded and the device synced to the smart device. The application is configured, map of the area selected and GoTenna is ready to be used. It was designed for outdoor usage so it is “weather resistant” but not submersible for an extended period of time. The GoTenna can be on “standby” mode for over 24 hours. This mode is just listening and not transmitting. We have not had a chance to compile a usage chart yet, but the frequently asked questions on the product states that if you send lots of messages (and message retries), the battery life will be much shorter. Because the GoTenna uses Bluetooth Low Energy technology to sync to the smartphone, the smart phone’s battery will not be impacted by the Bluetooth connection. These devices have the potential to be great tool to use during a disaster where normal communications are down. This type of device could be used with roving teams such as Damage Assessment, Search and Rescue and Re-Entry Teams.



The Invaluable Nature of Partnerships

Over the past several months I've had the opportunity to participate in several exercise and real world events that show how important partnerships are to emergency response and emergency management. It is often easy for us to get wrapped up in our own daily duties and forget that there are groups, organizations and other partnering agencies that are just a phone call away. Many of these partners can do more than just assist. In some cases, they can do what we are trying to do better, faster, or more effectively than we can.

Every year, Chatham County and the City of Savannah are affected by two large full scale events: Saint Patrick's Day and the Rock and Roll Marathon. Both of these events impact areas of the City and the County and both require large responses on the part of all agencies involved. Through the use of the National Incident Management System (NIMS) and the Incident Command System (ICS) these responses can be streamlined and the duplication of effort can be greatly reduced. Partnering agencies can fall into a system that meets one standard and can function without confusion because the plans are written and the command structure is consistent with a national standard.

This common response can be practiced in practical or functional activities such as CEMA's EOC Full Scale Exercise or the US Coast Guard's fall Savannah Area Maritime Committee Functional Exercise. The response can also be applied in small and more common real world events; the Martin Luther King Day Parade and July 4th Festival are both examples.

In the 2016 St. Patrick's Day Parade Response, Savannah Chatham Metropolitan Police Department (SCMPD) looked to partnering agencies from Federal, State, County and municipal levels to assist. These partnering agencies were brought into the Incident Command Structure for the event and were able to easily assimilate into the plan. Additionally through the combined efforts of SCMPD, City of Savannah, and CEMA, a Joint Information Center was established for the duration of the parade. This not only allowed a common message to be distributed to the citizens and businesses in our area, but also provided a real world exercise of a key function of Emergency Management that would otherwise be difficult to test.



Above: APO Pagliaro is interviewed by WTOC's Ben Williamson during CEMA's EOC Full Scale Exercise. Below: Metro Police Respond to an incident involving a Sheriff's Deputy. APO Pagliaro requests CEMA's Mobile Emergency Operation Center for incident command.

Additionally, partnerships between other counties' Emergency Management Agencies provided SCMPD with two Mobile Command Post Vehicles to utilize as forward Command Posts. Federal Protective Services agents from the Department of Homeland Security offered assistance with the Festival and were called on several times for DHS related questions and incidents involving foreign nationals. Local hospitals and EMS services had been contacted and met before the event to determine Mass Casualty Collection/Evacuation Points to prepare if the need should arise. The Georgia Emergency Management Agency, Public Health and a chemical, biological, radiological and nuclear defense team were on scene monitoring the situation as well. Additional support from Parking Services, the Savannah Harbormaster, US Coast Guard, Georgia State Patrol, Motor Carrier Compliance Division, Pooler Police, Bloomingdale Police, Chatham County Sheriff, Garden City Police, City of Savannah Sanitation, Traffic Engineering, and Parking Services sent units to assist and had representatives in the Command Center.

It is through these types of partnerships that make large and small events safe and successful. Through working together, we have the opportunity to smooth out wrinkles and work out the kinks in our response plans for the future.



Advanced Patrol Officer Jason Pagliaro is a 10 year veteran of the Savannah-Chatham Metropolitan Police Department and is currently the department's Emergency Management Liaison.

Chatham Community Emergency Management Program

SAVE THE DATES

April & May 2016

Highly Important Events are in Red

Georgia HURREX 2016

WHEN: May 16-20

WHERE: Statewide

WHO: All Emergency Personnel

POC: Tod Keys at Tod.Keys@gema.ga.gov**Hurricane Awareness Week**

WHEN: May 16- 20

WHERE: Statewide

WHO: Open to the Public

POC: Meredith Ley at maley@chathamcounty.org**Pre-Hurricane Season Training—County Departments**

WHEN: May 16, 11:00 AM- 2:00 PM

WHERE: Commission Meeting Room

WHO: County Department Heads

POC: Dennis Jones at dtjones@chathamcounty.org**Debris Management Coordination Meeting**

WHEN: May 17, 1:00 PM

WHERE: Annex EOC

WHO: ESF-3 Partners

POC: Dave Grotyohann at dsgrotyohann@chathamcounty.org**Local Emergency Planning Committee (LEPC) Meeting**

WHEN: May 18, 10:00 AM- 11:00 AM

WHERE: Savannah Civic Center

WHO: LEPC Members

POC: Randall Mathews at rjmathews@chathamcounty.org**Evacuation Assembly Area Plan Seminar**

WHEN: May 19, 9:00 AM- 12:00 PM

WHERE: Annex EOC

WHO: Agencies and Organizations with EAA Responsibilities

POC: Dave Grotyohann at dsgrotyohann@chathamcounty.org**Functional Medical Needs Plan Seminar**

WHEN: May 19, 1:00 AM—3:00 PM

WHERE: Annex EOC

WHO: ESF-6 & 8 Partners

POC: Kate Busbee at kbusbee@chathamcounty.org**Home Depot Hurricane Expo**

WHEN: May 21, 9:00 AM- 1:00 PM

WHERE: 190 Pooler Parkway

WHO: Open to the Public

POC: Meredith Ley at maley@chathamcounty.org**Chatham Community Organizations Active in Disaster (CCOAD)**

WHEN: May 24, 11:30 AM- 1:00 PM

WHERE: Salvation Army, Bee Road

WHO: Open to the Public

POC: Meredith Ley at maley@chathamcounty.org**ESF-4 & 9 Pre-Hurricane Season Meeting**

WHEN: May 24, 1:00- 2:00 PM

WHERE: Annex EOC

WHO: CEMA, Fire, Search and Rescue, Marine Rescue Squadrons

POC: Dustin Hetzel at djhetzel@chathamcounty.org**Atlantic Hurricane Season Starts****WHEN: June 1- November 30, 2016****Search & Rescue Team Training**

WHEN: June 4, 2016, 9:00

WHERE: Islands Precinct

WHO: Trained SAR Team Members

POC: Randall Mathews at rjmathews@chathamcounty.org**Georgia Ports Authority Tabletop Exercise**

WHEN: June 8, 9:00 AM- 3:00 PM

WHERE: Armstrong Center

WHO: Open to All Partners

POC: Dennis Jones at dtjones@chathamcounty.org**Chatham County Recovery Full Scale Exercise**

WHEN: June 9, 9:00 AM- 1:00 PM

WHERE: L. Scott Stell Park

WHO: Selected Chatham County Departments and Supporting Agencies and Organizations

POC: Don Sullens at dwsullens@chathamcounty.org**State WebEOC Administrator's Meeting**

WHEN: June 15, 1:00 PM- 3:00 PM

WHERE: GEMA/HS HQ / Webinar

WHO: WebEOC Administrators & IT Staff

POC: Dustin Hetzel at djhetzel@chathamcounty.org**WebEOC Refresher Training**

WHEN: June 16, 1:00 PM- 4:00 PM

WHERE: CEMA Office

WHO: WebEOC Users

POC: Dustin Hetzel at djhetzel@chathamcounty.org**Emergency Management Program Advisory Committee (EMPAC) Meeting**

WHEN: July 7, 3:00 PM- 4:30 PM

WHERE: Thunderbolt

WHO: Open Invitation for All Emergency Management Partners

POC: Dennis Jones at dtjones@chathamcounty.org**Search & Rescue Team Training**

WHEN: July 9, 9:00 AM

WHERE: Shipyard Fire Station

WHO: Trained SAR Team Members

POC: Randall Mathews at rjmathews@chathamcounty.org

Natural Disaster Awareness for Community Leaders (AWR-310)

WHEN: Thursday, July 14, 8:00 AM- 12:00 PM
WHERE: Georgia Ports Authority Annex 2,
100 Main Street, Garden City
WHO: Open to the Public
POC: Don Sullens at dwsullens@chathamcounty.org

Natural Disaster Awareness for Caregivers of Senior Citizens (AWR-308)

WHEN: Thursday, July 14, 1:00 PM- 5:00 PM
WHERE: Georgia Ports Authority Annex 2,
100 Main Street, Garden City
WHO: Open to the Public
POC: Don Sullens at dwsullens@chathamcounty.org

Chatham Community Organizations Active in Disaster (CCOAD)

WHEN: July 19, 11:30 AM- 1:00 PM
WHERE: Salvation Army, Bee Road
WHO: Open to the Public
POC: Meredith Ley at maley@chathamcounty.org

ICS 300- Intermediate ICS for Expanding Incidents

WHEN: July 26-28, 8:00 AM- 5:00 PM
WHERE: Southside Fire Station #3, 2009 Grove Point Road
WHO: Individuals who may assume a supervisory role in expanding incidents or Type 3 incidents.
POC: Don Sullens at dwsullens@chathamcounty.org

UPCOMING MONTHS AT A GLANCE

Search & Rescue Team Training

WHEN: August 6
POC: Randall Mathews at rjmathews@chathamcounty.org

ICS 400- Advanced ICS

WHEN: August 11, 8:00 AM- 5:00 PM
POC: Don Sullens at dwsullens@chathamcounty.org

Damage Assessment Team Training

WHEN: August 18, 8:00 AM- 5:00 PM
POC: Randall Mathews at rjmathews@chathamcounty.org

Damage Assessment Team Training

WHEN: August 20, 8:00 AM- 5:00 PM
POC: Randall Mathews at rjmathews@chathamcounty.org

Point of Distribution Training

WHEN: August 27, 8:00 AM- 5:00 PM
POC: Don Sullens at dwsullens@chathamcounty.org

Damage Assessment Training

WHEN: September 1, 9:00 AM- 12:00 PM
POC: Randall Mathews at rjmathews@chathamcounty.org

Search & Rescue Team Training

WHEN: September 10
POC: Randall Mathews at rjmathews@chathamcounty.org

Vigilant Guard Exercise Midterm Planning Meeting

WHEN: September 14- 15
POC: Dennis Jones at dtjones@chathamcounty.org

EOC Staff and WebEOC Training

WHEN: September 15, 9:00 AM- 4:00 PM
POC: Dustin Hetzel at djhetzel@chathamcounty.org

Volunteer Reception Center Seminar

WHEN: September 17, 9:00 AM- 12:00 PM
POC: Meredith Ley at maley@chathamcounty.org

EOC Supervisor Training

WHEN: September 22, 9:00 AM- 11:30 PM
POC: Dustin Hetzel at djhetzel@chathamcounty.org

Damage Assessment Team Training

September 29, 9:00 AM- 12:00 PM
POC: Randall Mathews at rjmathews@chathamcounty.org

Changes Are Coming!

FEMA is in the process of reviewing and refreshing NIMS and is seeking stakeholder input on the draft. The draft of the refreshed NIMS retains key concepts and principles from the 2004 and 2008 versions, while incorporating lessons learned from exercises and real world incidents, best practices, and changes in national policy, including updates to the National Preparedness System.

The draft NIMS:

- Reiterates the concepts and principles of the original 2004 version and the updated 2008 version;
- Reflects and incorporates lessons learned from exercises and real world incidents and policy updates, such as the National Preparedness System and NIMS-related guidance, including the 2013 NIMS Intelligence/Investigation Function Guidance and Field Operations Guide;
- Reflects progress in resource typing and mutual aid and builds a foundation for the development of a national qualification system;
- Clarifies that NIMS is more than just the Incident Command System (ICS) and that it applies to all stakeholders with roles in incident management across all five mission areas (Prevention, Protection, Mitigation, Response and Recovery);
- Provides guidance on a common structure and activation levels for operations and coordination centers, including Emergency Operations Centers (EOC), through new Center Management System (CMS) guidance;
- Note that while we will continue to track NIMS implementation, the adoption of CMS is not mandatory as part of preparedness grants;
- Explains the relationship among ICS, CMS, and Multiagency Coordination Groups (MAC Groups); and
- Enhances guidance on information management processes to improve data collection plans, social media integration and the use of geographic information systems (GIS).



Chatham Emergency Management Agency
124 Bull Street, Room 140
Savannah, Georgia 31401
Office: 912-201-4500

Whole Community Emergency Management



1Q16 (JAN – MAR) EMERGENCY MANAGEMENT PROGRAM ADVISORY COMMITTEE (EMPAC) REPORT CARD

EVALUATION FACTOR	GRADE (5.0 Highest)
1. Chatham EMA supports my organization and acts in my best interest regarding emergency management activities.	A (4.52)
2. My inquiries are responded to in a timely manner.	A (4.55)
3. Focusing the Emergency Management Program on Community based planning is effective.	A (4.52)
4. For plans in which I have a role/responsibility, I feel that my feedback and participation are important.	A (4.58)
5. When assistance is requested, Chatham EMA is regularly ready to support.	A (4.42)
6. My ideas regarding emergency preparedness, response, recovery and mitigation are well received.	A- (4.32)
7. I am satisfied with the quality of planning and the documentation produced for the EM Program.	A- (4.29)
8. Emergency Management Training and Exercise opportunities meet my organization's need.	B+ (3.94)
9. Situational awareness alerts and notifications are timely, relevant and helpful to my discipline and the community.	A (4.42)
10. The Emergency Management Program engages the community and promotes emergency readiness and safety.	A- (4.16)
11. A wide variety of partners are integrated into the Emergency Management Program to address community needs.	A- (4.35)
12. I consider Chatham EMA a valuable source for emergency and preparedness information.	A (4.50)
13. During an emergency response, Chatham EMA provides sufficient support when requested by First responders.	B (3.61)
14. I am confident / comfortable with my role / responsibilities during an emergency event.	B+ (3.81)
15. Chatham County is well prepared for a large-scale disaster.	B+ (3.71)

1Q16 OVERALL EMPAC GRADE:

A- (4.25)

Quick Tips: Tree Care After Storms



Major storms can inflict severe damage to the tree canopy in a very short period. Yet some trees survive with minimal damage. With proper advance care, much of the most severe damage to trees and property can be avoided. Here are seven suggestions for tree care before a storm strikes:

1. **Remove All Dead Branches**
2. **Encourage Good Branch Angles:** For most deciduous trees, narrow angles in the forks between branches indicate future points of failure. Angles should be at 10:00 and 2:00 o'clock or greater.
3. **Encourage A Strong Branch/Trunk Size Relationship:** Lateral branches should be no greater than $\frac{1}{4}$ to $\frac{1}{2}$ the diameter of the adjacent trunk.
4. **Maintain A Stable Center Of Gravity:** If a tree is leaning, remove or correctly prune branches on the leaning side and encourage branch growth on the opposite side.
5. **Remove Temporary Branches:** This includes water sprouts, suckers, and branches that are rubbing each other.
6. **Don't Form Stubs When Pruning Branches:** If a branch needs to be removed, cut it back cleanly to the trunk or to the main branch. Stubs invite insect infestation, fungal disease, and rot.
7. **Remove Heavy Vine Growth:** As attractive as it may be, heavy coverings of English Ivy, Wisteria, multiflora rose, Virginia Creeper, and other vines create additional wind resistance and add additional weight to limbs, often leading to failure in storms.

After the Storm: First Things First

If A Tree Requires Immediate Attention, Call A Certified Arborist. If a tree is leaning on wires, buildings, or snagged on other trees, professional assistance is needed. If the tree is on a city right-of-way, call 311 before having work done. Contact your insurance company before work is done to clarify their requirements; they may need to approve of any contractor you hire.

If The Tree Is Not A Hazard, Make Sure It Gets Continued Care. It is fine to wait a few weeks or months before making a decision on the fate of a tree. The cost for such treatment may well go down from that quoted directly after a storm.

Carefully Assess A Tree's Potential For Survival. In the immediate aftermath of a storm, many homeowners rush to clear away as much debris as possible, often making decisions to remove trees that could have been saved with proper treatment and care. If more than half a tree's branches or mass has been damaged and needs to be removed, it is doubtful that it will be able to produce adequate foliage for nourishment in the coming seasons. If in doubt, schedule a consultation with a certified arborist.

Don't Be Scammed! After a storm tree care "experts" come out of the woodwork, offering to remove your trees for a very low price. Unfortunately, one gets what one pays for and the end result of such work is often very unsatisfactory. Hire an established professional.

After the Storm: Doing it Yourself

After damage analysis and/or consultation with a professional, you decide to work on a damaged tree yourself, here are some rules to follow:

Don't Try To Do It Yourself: If it is a large tree with large hanging branches ("widow makers") and will require climbing and overhead chainsaw work, DON'T do it yourself. Call a certified arborist.

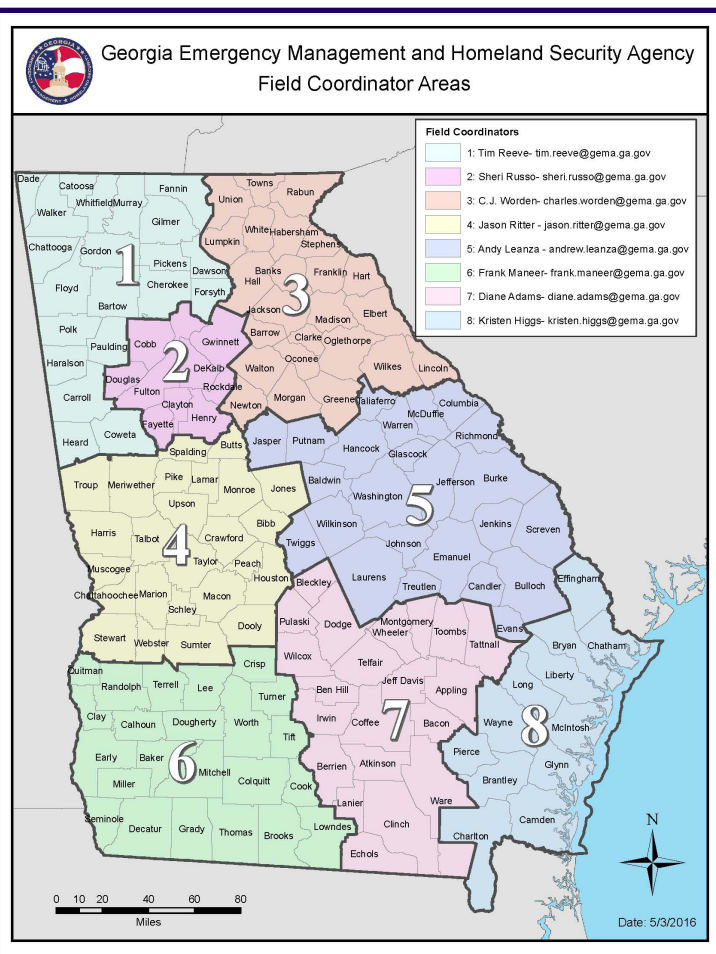
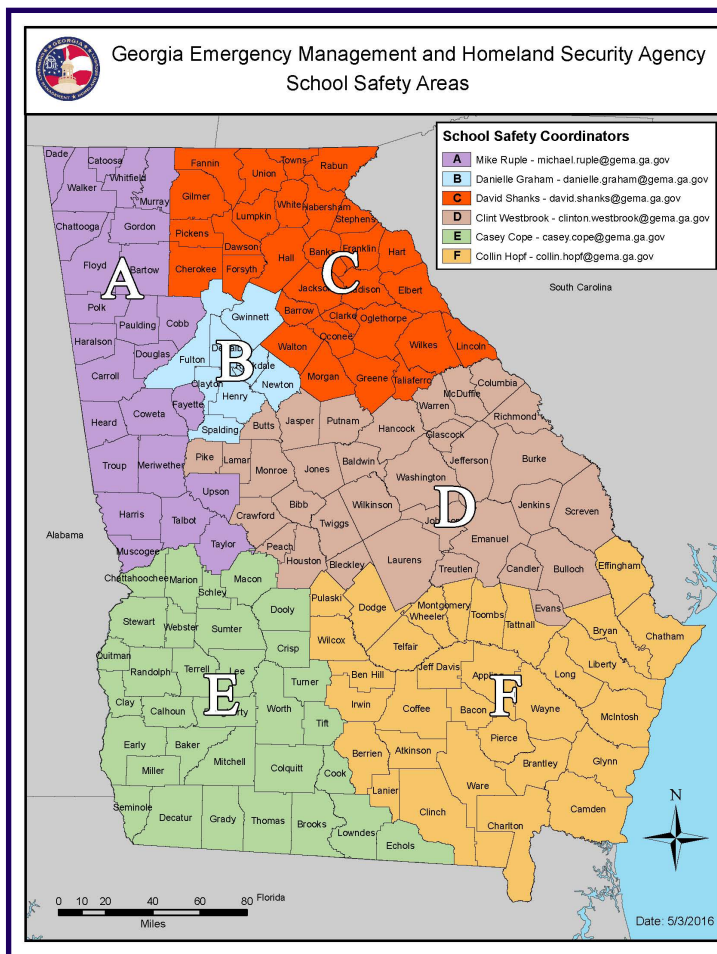
Don't Try To Do It Yourself: If there are downed electrical lines, phone or cable lines in the area call the utility company.

If you are still determined to work on a damaged tree, here are some pointers:

Remove Broken Branches: Remove the jagged remains of broken branches. With large branches, remove the larger part of the branch up to 12"-24" from the trunk, then go back and carefully remove the stub close to the trunk. Smaller branches should be pruned back to their juncture with a larger branch

Repair Torn Bark: With a sharp chisel or sharp knife smooth the edges of wounds where bark has been torn or shredded. Do not expose the inner greenish cambium layer any more than necessary, since it is necessary for transport of food and water within the tree. Do not "paint" the wounds.

For Trees in the City of Savannah Right-of-Way call 311. For Additional Information visit www.savannahtree.com.



Have an Idea for the Signal?

This newsletter focuses on activities and accomplishments for each Emergency Support Function and other areas of the Emergency Management System throughout Chatham County. The newsletter is an available conduit for our partners who may have an interest in submitting a short article or to advertise an upcoming meeting, training event or exercise. For those interested in submitting content for the upcoming newsletter, please follow the submission criteria below:

- **Submissions emailed to:** Meredith Ley, maley@chathamemergency.org
- **Deadline:** October 2nd, 2015
- **Article Length:** 100 - 750 words
- **Article Submissions:** Include Article Title, Author Name, Title and Agency
- **Meeting Notices:** Include Meeting Title, Date, Time, Location and Point of Contact (Name, Phone and Email Address)
- **Training Notice:** Include Training Title, Date(s), Time(s), Location, Prerequisites, Registration Deadline, Costs, Point of Contact (Name, Phone and Email Address)
- **Exercise Notices:** Include Exercise Title, Date(s), Time(s), Location and Point of Contact (Name, Phone and Email Address)
- **Editorial Note:** The Editor has the discretion to edit submissions. If changes are considered substantive, the author will be contacted to review the changes prior to publication.



DENNIS JONES
INTERIM DIRECTOR

MEREDITH LEY
PUBLIC INFORMATION OFFICER

Chatham Emergency
Management Agency
124 Bull Street, Suite 140
Savannah, GA 31401
(912) 201-4500 (Office)
(912) 201-4504 (Fax)

www.ChathamEmergency.org
Facebook and Twitter:
ChathamEMA