



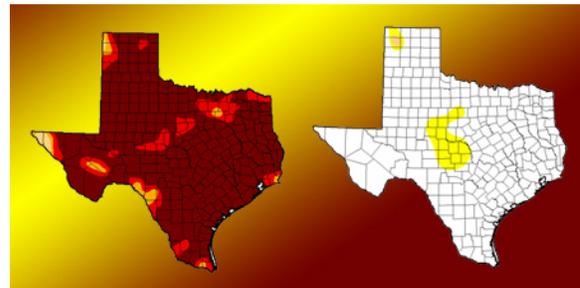
## TEXAS EMERGENCY MANAGEMENT ONLINE

2015 Vol. 62 No. 7

The Texas Division of Emergency Management is accepting article submissions for The Texas Emergency Management Online (TEMO) newsletter. If you have an idea for a topic or would like to submit an article, contact [Mike Jones](#) at 512-424-7050.

### Message from the Chief – July 2015

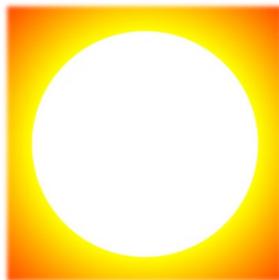
Officially, summer in the Northern Hemisphere began at 11:39 p.m. CDT on June 21. *Unofficially*, summer in Texas starts with the July Fourth holiday. For the first time in many years, most of Texas is heading into summer drought free. Many lakes around Texas are either full or at normal levels. So, we'll be out by the millions, working and playing in the Texas sun.



Heat is the number one weather-related cause of death in the United States, and, in Texas, the heat can be intense. As temperatures rise, it is important to be prepared to safely do everything we do in the extreme heat.

Elderly people, infants and children and people with chronic medical conditions are most prone to heat stress. Other people at risk are those who are obese or suffer from heart disease, as well as those who are taking certain prescription drugs or drinking alcohol. If you or any of your family or friends fall into these categories, it's a good idea to monitor how often and how long you're exposed to the heat. It's also a good idea to take precautions to prevent the dangerous conditions that can lead to heat stress.

The Centers for Disease Control and Prevention recommends using common sense and drinking plenty of fluids when it's hot, especially if you're active in the outside heat. And fluids mean water or drinks that replenish sodium and other essential nutrients and minerals, not alcoholic beverages or drinks high in sugar, carbonation or caffeine.



If you choose to or must be outside in the heat, take extra precautions. Learn to recognize symptoms of heat stress. Schedule your time and activities carefully. Wear sunscreen. Pace yourself. Wear appropriate clothing. Have a place where you can cool off. And use a buddy system.

Finally, don't leave kids and pets in hot cars! Since 1998, 95 kids have died needlessly from being left in hot cars in Texas.

There are many online resources available to learn more about how to prepare for the hot days ahead. Enjoy your summer, but take the time now to learn as much as possible about how to prepare for the excessive heat.

Chief W. Nim Kidd, CEM®, TEM

Follow [@chiefkidd](#) on Twitter

[CDC Extreme Heat: A Prevention Guide](#)

[National Weather Service: Heat](#)

[Ready.gov: Extreme Heat](#)

[SafeKids.org](#)

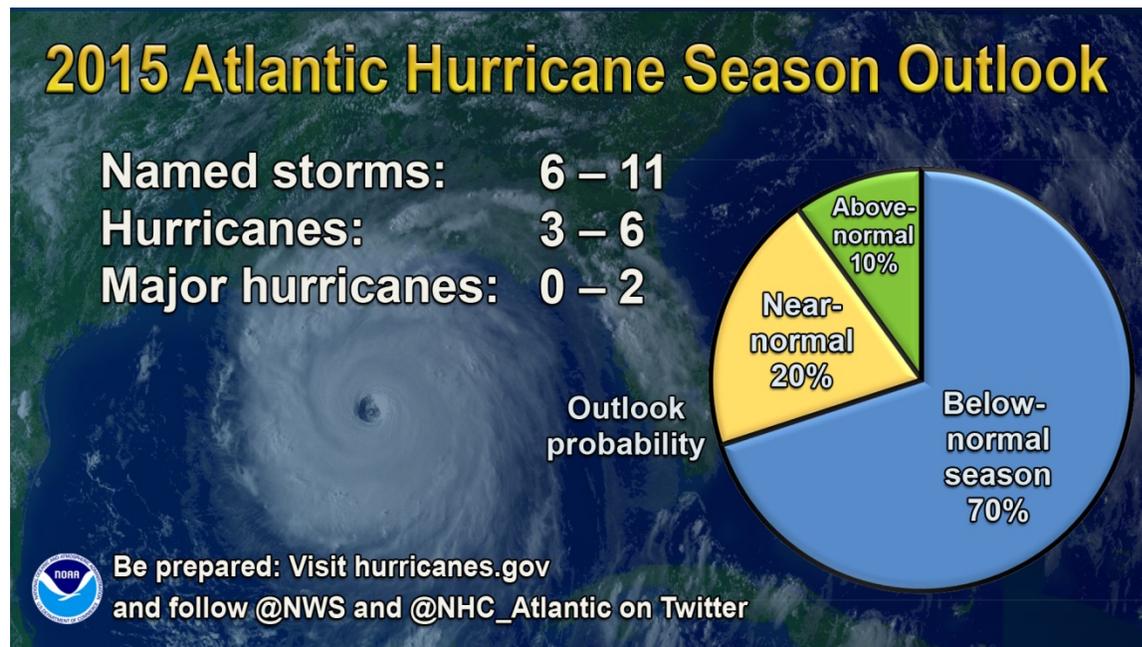
## Below Normal Hurricane Season Forecast for 2015

On May 27<sup>th</sup>, NOAA's Climate Prediction Center released their prediction for the 2015 Atlantic Hurricane Season. Hurricane season runs from June 1<sup>st</sup> through November 30<sup>th</sup> with the most active part of the season occurring between August through October. For more information on hurricanes and specifically hurricane climatology visit this website:

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

### Hurricane Forecasts By the Numbers

According to the National Hurricane Center on average, each Atlantic hurricane season sees 12 named storms (tropical storm or hurricane), about 6 hurricanes, and 3 major hurricanes (Category 3 or greater). The forecast for the 2015 season can be seen below:



This is the May outlook from the Climate Prediction Center. They will update this outlook mid-season in August. While this is the official NOAA Forecast there are several other universities and other meteorological entities that produce forecasts. A few of those are listed below along with the average, record high, and record low values:

Organization	Named Storms	Hurricanes	Major Hurricanes
<b>NOAA</b>	6 – 11	3 – 6	0 - 2
<b>Colorado State University</b>	7	3	1
<b>North Carolina State Unvers</b>	6	3	1
<b>UK Met Office</b>	8	5	No Forecast
<b>Average (1981-2010)</b>	12.1	6.4	2.7
<b>Record High</b>	28 (2005)	15 (2005)	7 (2005)
<b>Record Low</b>	4 (1983)	2 (2013)	0 (2013)

### **Reasons for the Below Normal Season**

The main culprit for the below normal Atlantic Hurricane Season is El Niño. To find out more about El Niño see this previous [TEMO article](#). El Niño, which has already brought us a very wet spring across Texas, is forecast to continue and possibly intensify through the Summer and into the Fall. Hurricanes like very warm water, with little wind shear, and rising motion. During El Niño the pattern across the Atlantic is one with increased wind shear, and more sinking motion. Sea surface temperatures are also forecast to be near normal this summer, resulting in minimal impact to the overall seasonal activity.

### **It Only Takes One!**

The important thing to remember as meteorologists, emergency managers, and the public is that although a below average season is forecast, this is a forecast of total tropical cyclone activity, NOT a landfall forecast. We have already seen a tropical storm (Ana) make landfall this year in South Carolina. It only takes one storm to cause devastation during hurricane season. One notable example of this is 1992. Only 7 named storms formed that year, very similar to what is being forecast this year. Despite the below average season, the A named storm was a Category 5 major hurricane and made landfall in the United States, devastating South Florida. That storm's name was Andrew.

For more information on the NOAA 2015 Atlantic Hurricane Season Outlook check out:

- <http://www.cpc.ncep.noaa.gov/products/outlooks/hurricane2015/May/hurricane.shtml>
- <http://www.noaanews.noaa.gov/stories2015/20150527-noaa-hurricane-outlook-below-normal-atlantic-hurricane-season-is-likely-this-year.html> and
- <http://www.nhc.noaa.gov>

## Resiliency During Long-Term Emergency Activations

On Saturday night, May 23, 2015, during the Memorial Day weekend, a severe storm hit Blanco and Hays counties in Central Texas. As daybreak came Sunday morning, the level of destruction that occurred along the Blanco River in the town of Wimberley became very apparent. The first responders on site, consisting of firefighters, EMTs, paramedics, pilots and law enforcement, made numerous water rescues with high-profile vehicles, boats and helicopters. Their specialized training prepared them to perform during that very challenging and stressful environment. Together they made a large impact on the community and saved many lives. This historic event will long be remembered for its devastation and the tragedy it left behind.



Nighttime SOC Operations

approached the Texas coast.

At the time of Memorial Day weekend floods in Central Texas, the State Operations Center (SOC) had already been involved in a lengthy, 24/7 activation. Beginning in early May, recurring severe weather and flooding had affected almost all of the state, from Wichita Falls to Rio Grande City. The seemingly endless severe weather brought widespread flash flooding, high winds and tornadoes across the state. The event caused major damage in over a hundred counties, costing millions of dollars and sadly, loss of life. After 29 days

of activation, the SOC was finally demobilized on June 5, only to be reactivated June 16 as Tropical Storm Bill

When the SOC is activated, many people representing local, state, federal and nonprofit agencies are brought together to provide support and infrastructure during large-scale disaster response. With little press or notoriety, they provide support to the affected cities and counties anywhere in the state with ready and available assets. It becomes a significant physical and mental challenge for the staff, who are working 12 to 14 hour shifts for several days in a row, alongside coworkers as well as unfamiliar staff from other agencies, all of whom are working outside of the routine of their normal, day-to-day environment.



Cleaning up after a flood.

effects on a person's physical and emotional well-being.

During local emergencies and disasters, communities across Texas activate their own response systems, from large, sophisticated emergency operating centers to small community-based response and recovery actions. Some responders, such as community relief and recovery staff may be working over large areas or may have to constantly travel to multiple sites over long periods of time. Coping with the long, abnormal hours, the uncertainty of an unfolding situation, the lack of control during and the sheer amount of people and work involved at an incident can have profound

There are high expectations and challenges associated with an activation that can cause mental stress, depression and physical fatigue.

- Continuing and changing forms of stress can cause a lack of concentration, memory loss and errors in judgment.
- Extended periods under stress, such as when workers experience high demands and low levels of control over their work, may cause depression.
- Extended periods of highly demanding and stressful situations coupled with long work hours can cause abnormal physical fatigue or work exhaustion.

Everyday life is full of physical, psychological and emotional stress. However, some of the common challenges faced by staff during a long activation or deployment can lead to abnormal feelings from the stress, such as:

- Anxiety
- Grief
- Uncertainty
- Depression
- Irritability
- Agitation
- Lack of emotion
- Feeling overwhelmed

### **Healthy survival during a long deployment**

Resiliency is the ability of an individual to bounce back from intense or unexpected adversity and to cope with that stress in healthy ways. The goal of public safety resiliency is to help participants manage their stress effectively by using practices established through research-based resiliency methods. This involves a platform to support their physical, psychological, emotional and social system needs.

During stressful times, it's important to take care of yourself in order to take care of others. Much of the stress can be allayed if you are as prepared as possible prior to being activated. Have an activation plan in place long before there is the possibility that you will be activated. Do you have someone who can take care of your kids or others in your care?

Look after your pets or livestock? Watch your house? Remember that your reliance on your support people will cause stress in their normal lives as well. Do you have a plan to perform your daily tasks, such as filling prescriptions while you're working abnormal hours?

Here are a few skills you can practice to have the resiliency for surviving a long activation or deployment:

- Maintain proper nutrition. Although the burger joint across the street is open 24 hours, limit your intake of junk food. Select healthy meals and snacks, such as foods that contain natural sugars and protein.
- Get your exercise. If you have an exercise regimen, try to stick with as much of it as possible. Take the time to get away from your computer screen and walk around, get fresh air and perform stretches.
- Get your rest. Six to eight hours each day of uninterrupted sleep is best. If this is not possible, find a time and a quiet place for restorative naps.
- Find other ways to relax. If you can, take a day or two off when possible and get away from work. Take time for a massage or read a book. If you're normally active, try to participate in some of the activities you usually do during your normal off-work time.

- Call on your social support with coworkers, family and friends during stressful times. It's important to recognize when you are reaching your limits and to be able to communicate your feelings to any of these people. On the job, keep an eye on each other and recognize behavioral changes that show signs of poor stress management.
- Avoid alcohol and drugs. Your body is already trying to cope with long hours, adjusted schedules, and other stress.
- Avoid making significant or life-changing decisions, such as moving or making large purchases until after you're back to your normal routine.

There are people who are attracted to the front line work of emergency response. These individuals often have innate characteristics that allow them to work and even thrive in stressful environments. Beyond that, they also are often taught how to further develop and practice various positive coping skills. These skills help them to readily bounce back and recover from the traumatic aftermath of extreme events (Resilience & Recovery). Many of the professionals who get pulled into an extended duty in an emergency operations or community recovery center, may not have same front line experience or exposure to disaster response as trained responder, but the behind-the-scenes work during an extended activation can have similar physical, psychological and emotional effects as the challenges and stress of being in the field.

It's very important to realize that the professionals involved in a behind-the-scenes activation or deployment to the front lines all work to save lives, restore communities and serve the citizens of the state of Texas. All are vital for the success of the incident response and management and all may suffer similar consequences from the challenges and stress involved. It is important to acknowledge, recognize and manage the physical, psychological and emotional effects of those challenges and stress. This can be the key to a successful engagement during and recovery from an activation or deployment.

#### Bibliography

MacMillan Dictionary

[www.jems.com/articles/2012/06/ems-industry-lacks-resilience](http://www.jems.com/articles/2012/06/ems-industry-lacks-resilience)

[www.emsworld.com/article/11144288/national-preparedness](http://www.emsworld.com/article/11144288/national-preparedness) FEMA Speaks Out on Preparedness, Resilience

## **Tips for Managing and Preventing Stress: A Guide for Emergency and Disaster Response Workers**

Normal Reactions to a Disaster Event

Signs That You May Need Stress Management Assistance

Ways to Help Manage Your Stress

### **Normal Reactions to a Disaster Event**

- No one who responds to a mass casualty event is untouched by it
- Profound sadness, grief, and anger are normal reactions to an abnormal event
- You may not want to leave the scene until the work is finished
- You will likely try to override stress and fatigue with dedication and commitment
- You may deny the need for rest and recovery time

### **Signs That You May Need Stress Management Assistance**

- Difficulty communicating thoughts
- Difficulty remembering instructions
- Difficulty maintaining balance
- Uncharacteristically argumentative
- Difficulty making decisions
- Limited attention span
- Unnecessary risk-taking
- Tremors / headaches / nausea
- Tunnel vision / muffled hearing
- Colds or flu-like symptoms.
- Disorientation or confusion
- Difficulty concentrating
- Loss of objectivity
- Easily frustrated
- Unable to engage in problem-solving
- Inability to relax when off duty
- Refusal to follow orders
- Refusal to leave the scene
- Increased use of drugs / alcohol
- Unusual clumsiness

### **Ways to Help Manage Your Stress**

- Limit on-duty work hours to no more than 12 hours per day
- Make work rotations from high stress to lower stress functions
- Make work rotations from the scene to routine assignments, as practicable
- Use counseling assistance programs available through your agency
- Drink plenty of water and eat healthy snacks like fresh fruit and whole grain breads and other energy foods at the scene
- Take frequent, brief breaks from the scene as practicable.
- Talk about your emotions to process what you have seen and done
- Stay in touch with your family and friends
- Participate in memorials, rituals, and use of symbols as a way to express feelings
- Pair up with a responder so that you may monitor one another's stress

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*Please note that this online publication has been abridged from the printed version.*

## Memorial Day Floods – Responding in Wimberley

May 23, 2015 started out as many of my days had since May 8, when the State Operations Center first activated as severe weather began to develop across the state. Little did I know that, by the end of the day, the lives of many of my friends and neighbors would be changed forever, and I would be challenged like never before.

I began working at TDEM in January, but I have been involved in emergency services for over 28 years. I've been a responder during many of the nation's biggest flood disasters including Tropical Storm Allison, Hurricanes Katrina and Ike as well as several other significant flood events. I've taught swiftwater rescue, boat operation and helicopter rescue swimmer courses across the United States. Nothing compares to the challenges I would face over the next two weeks.

At 04:00 my alarm went off. I live in Wimberley, which is about 45 miles southwest of the Texas Department of Public Safety's Austin headquarters and home of the State Operations Center. By 05:45, I'm at the SOC. As I prepare for my shift as the TDEM Air Operations Liaison, I'm getting briefed about the night's activities by Steven Bjune, the Texas Task Force 1 night shift representative. Next, I make my morning call to Brett Dixon and the Joint Air Ground Coordination Team in College Station to brief them on any overnight SOC changes and get updates on aircraft status across the state. All in all, it was a normal start to normal level of chaos during a state activation.



The spot from where a home was washed away from its foundation.

As the day continued with briefings, meetings, and planning sessions, I watched the severe weather developing in the Hill Country around Kendalia and Blanco. I had been texting a friend of mine, Travis Maher with Texas Task Force 1, who is also a captain in the Wimberley Fire Department, about ongoing rescues in Spring Branch and Boerne. Travis was assigned as a water team manager and was in the San Antonio area with swiftwater boat squads. We were receiving reports that over six inches of rain had fallen in just over an hour in the Blanco area. Having lived in the Wimberley valley for over 20 years, I knew that things could get really bad with that amount of rain upstream. I made a call to Kharley Smith, the Hays County Emergency Management

Coordinator; we talked about the rain amounts and what it could mean to the Blanco River.

We both agreed that the Blanco River would be rising into flood stage, but neither of us could have predicted what was about to happen to so many living along the river. I received a phone call from Chief Mark Padier in Caldwell County. Chief Padier was concerned about over 100 tourists who were camping at an RV park near the San Marcos River for the Memorial Day weekend. Caldwell County was going through the process of coming up with a plan of when to evacuate campers if needed. Chief Padier and I talked for several minutes and, as Wimberley does for Blanco, I Told Chief Padier I'd give him a call if Wimberley got busy with calls. I really didn't expect to talk to him again so soon.

Around 20:00 I was giving my last bit of pass on for the evening and headed home to what I thought was going to be a nice day off from the SOC. I continued to watch the weather and the climbing rainfall estimates for the Blanco River watershed. During my drive home I called and spoke with Wimberley Fire Chief Carroll Czichos (hands free of course). I passed along the rainfall estimates that we were getting in the SOC, and he said he would make some phone calls to Blanco Fire Department members who live along the river. Since there are no river gauges along the Blanco River upstream of Wimberley, the phone-a-friend system is the only warning we get about rising water along the river. Chief Czichos was quick to call me back and report that water had risen sharply in Blanco as the rain continued to fall. Several minutes later



Little Arkansas Crossing – the flood waters removed the asphalt from the roadway and destroyed the low water bridge.

Chief Czichos called again to ask where I was on my commute home. Hays County Sheriff's Office had just paged out North Hays County Fire Department to a tornado on the ground in Dripping Springs. By chance, that's exactly where I was on my drive home. Chief Czichos passed on the exact location of the tornado, which was about a mile north of my location as I turned south on the final leg of my commute home. Although it was raining fairly heavy, I didn't have any reservations about continuing to drive south. However, about eight miles later, I began to regret that decision.

The rain was now coming down in sheets to the point that I had zero visibility. The increasing wind shook my Chevy Tahoe. I called Chief Czichos back to get a weather report, but we couldn't hear each other over the noise from the wind and rain. All I could think was, *I guess I found the tornado!* About five minutes later the wind slowed enough that I could see the striping on the road through the driving rain. Concerned that I could be struck by another car because of the poor visibility and where I had stopped on this two-lane road, I decided to start to move again, heading south. I was able to get a call out to Chief Czichos, and he reported that the rain cell had just dumped a



RR12 Bridge – Water crested more than 8' above the RR12 Bridge which sits 42' above the river.

huge amount north and west of Wimberley.

The Wimberley Fire Department, Hays County and city of Wimberley had started normal procedures for area flooding. This meant closing roads that are prone to flooding, making reverse 911 calls to homes lowest to the flood plain and also calling contacts upstream for first hand reports. Those reports continued to get worse. One of the upstream ranchers, who has lived on the river for over 50 years, called Kharley to report that the river was the highest he had ever seen.

The Wimberley Fire Department, Hays County and city of Wimberley had started normal

I told Chief Czichos that I would stop by my house to get a change of clothes then meet him at the fire station. Wimberley is a volunteer fire department, but it has several trained swiftwater personnel. But, due to the last few years of drought many of the volunteers have had limited or no real-world experience in high-risk rescue operations. This was about to change.

As I was about to turn into my subdivision, the first water rescue call came in. It was from a woman who lived about eight miles west of Wimberley. She had four feet of water in her home, and it was rising quickly. As a responder, I have learned to always keep gear with me. You can't always predict when things may go seriously wrong for someone. Instead of going home, I continued on to the fire station. The first engine with our rescue boat in tow had just rolled out of the station as I arrived. So, I dropped the clothes I had on, donned my dry suit and PFD, grabbed a second rescuer, and away we went.



Fischer Store Bridge (river left view) – The flood waters floated the bridge off its pillars, isolating residents.

Once in the area of the caller, we encountered several small flood crossings until coming to the end of the road. This road is elevated and over a quarter of a mile from where the river normally flows. When we arrived, it had been overtaken by flood waters. After assessing where we were in relation to the caller's home along with the risk to the caller and our team, we made our plan to use the rescue boat and evacuate her. This may seem like an easy decision, but we had reservations because it was a high-risk operation and we had no backup.

We could see telephone wires just above the surface of the water, which could mean that live power lines were nearby. I would need to be mistake free as I navigated the boat through the trees and other obstacles. There was not another boat coming, and the helicopters were not flying due to the weather and night restrictions. We approached the home from the off-stream side and secured the boat next to the second story balcony. We could hear the river raging and the sound of trees and structures breaking on the other side of the house. The home owner asked if we could take her pets out of the house. Before I knew it we had a bird tucked in a suitcase, a cat in a pet carrier, a standard poodle and our survivor secured on the floor of our rescue boat. This was just a preview of the chaos the night would bring.

Once we had our survivor and her pets safely back to shore, the crew who helped us launch advised us that there were two more calls pending. We quickly loaded and headed to others in distress. The calls were now coming from downstream and closer to Wimberley. As the calls continued to come in, I quickly realized I needed to call on my friends.

Having spent the last couple of weeks working in the SOC, I knew where state assets had been prepositioned and about how long it would take to get them. I made calls to Travis Maher requesting his boat squads; to Stephen Bjune to get a report of available assets and about sending Texas Task Force 1 resources to us; to Brett Dixon to have the helicopters ready to fly as soon as daylight broke; and to Chief Czichos so he could contact the county

EMC, start the official resource request for mutual and state aid and, most importantly, start warning people of what was happening on the Blanco River.



Fisher Store Bridge (river right view) – Homes were destroyed as the river rose to record levels.

Hays County dispatch had already started reverse 911 calls to warn residences along the river. Other city and county agencies were going into neighborhoods to warn those living near the river. The situation was about to get bad. I thought it was also very important to call Chief Padier in Caldwell County. As *politically correct* as possible, I told him that, although I had no legal authority to order an evacuation in his county, he should, "Get those campers out!" About a week later I saw Martin Richey, the Caldwell County EMC. He told me they had used that information to enact a mandatory evacuation along the river, and the evacuation definitely saved lives in Caldwell County.

As the night continued, the calls for help kept coming. The alert pager on my phone was going off every one or two minutes with another address. I can still hear those tones sometimes when things are quiet. The calls were coming so fast and the distress was increasing with each caller that we were quickly over tasked. All local first responders were engaged in some sort of evacuation. Sheriff's deputies and constables were in neighborhoods using their vehicle loud speakers and lights to guide people to higher ground. EMS units were monitoring people in houses until rescue units could arrive. Fire department teams were moving survivors to collection points on high ground. Other state and regional rescue units began to arrive about 90 minutes after the first person was pulled from her home, and they were a very welcome site.

The Wimberley Fire station had become the staging area and command post for rescue efforts in the valley. Travis had arrived with the water teams from Texas Task Force 1. He and Chief Czichos began sectioning the river and assigning teams to sections instead of addresses. We now knew that there were no safe places anywhere near the Blanco River and everyone in or around it needed to be evacuated. Calls were coming from both sides of the river, but by midnight Wimberley had been virtually cut in half. The Ranch Road 12 Bridge over the Blanco River is normally more than 45 feet above the water, but it was covered with rushing water and debris. One fire truck attempted to cross the bridge when the water first began flowing over it. They got about a third of the way across before they knew it wouldn't make it all the way. By the time they were able to back the truck off of the bridge, rapidly flowing water covered its tires. The rushing water was rising that fast. The rescue and evacuation efforts lasted most of the night. Sometime around 04:00 the water started to recede. The efforts now turned toward clearing homes and finding anyone who might be injured. The high school had opened its gym as a shelter for those displaced by the flooding. Buses were being used to move people from collection points to the school, and volunteers had come to provide food, blankets and clothing for those affected. It was truly a whole community effort.

When the sun rose the next morning, we began to realize the level of devastation that had occurred. I made my way back to the command post from the river where I had been operating all night to find that some of our own were affected by this disaster. One of our firefighters managed to escape along with her two boys as the water destroyed her home. Chief Czichos lost a major part of his family business. The Czichos family has operated a popular resort on the Blanco River since the 1950s. It is always busy throughout the summer, but now the cabins enjoyed by so many generations of families were gone.



Destroyed home – Even homes once thought to be out of any flood danger were destroyed.

The next phase of this disaster was now underway. There was a lot of work ahead of us, and organizationally we were suffering. With our chief being personally affected by the floods, our assistant chief not available, our captain (Travis Maher) assigned to Texas Task Force 1, I was left to serve as the incident commander for Wimberley. I knew I could do the job, but it's just not my normal function during a disaster. I'm a rescue guy; not an incident commander. Until now. It felt like being in class, and, at the very end, the instructor announces that there will be test covering everything that she just taught. And I'm sitting in the chair, thinking that I should have paid more attention ...

There were many issues that we needed to address. Search efforts were in full operation now. Public safety and security were also high on the list. We had unstable structures, missing people, and open shelters. The essential needs for the community were out. This was the biggest disaster ever to hit Wimberley. So, just like in a rescue, when in need, call your friends for help. I sent a request to Hays County to deploy a state incident management team to Wimberley.

Initially there was some confusion between Wimberley and Hays County about what we were asking for and what they believed we needed. San Marcos, the Hays county seat, is downstream from Wimberley. They are now being impacted by the same severe weather as Wimberley, and they were also overwhelmed by heavy flooding. Eventually, we received help. Jimmy Mullins and Guy Duncan from the Texas A&M Forestry Service arrived. It was significant that these two came, because I had just spent the last several days in the SOC with them, where we worked together in the Emergency Services Branch. They were just the people I needed to help us get a handle on this disaster. Together we began to identify our problems and develop plans.

The effort to address the immediate needs was never short of people who were willing to help. This was truly a team effort, from Chief Kidd to Mike Miller, Jack Doebbler and Summer Ray as well as so many other state, county and local officials. They all were there for the community. As a planner, it is so important during those first hours to set the tone for the entire event. We did everything we could to let the community know that, yes we are hurt, but we will get through this together.

As the rescue efforts slowed, my role of managing the disaster grew. I have been to the classes and done the drills, but nothing can completely prepare someone like a real event. While we continued to identify exactly who was missing and to develop search plans, other

aspects like donation and volunteer management, security, debris removal, documentation of efforts and damage assessments were all now sharing the stage. The flooding incident had grown to a countywide event. Hays County activated its emergency operations center in San Marcos with Kharley acting as the incident commander on behalf of the Hays county judge. Wimberley became a branch of the incident, and I became the branch director and remained in that role until we closed the branch on the morning of June 8.

From the tragic loss of life to the unbelievable amount of destruction, the Wimberley valley will never be the same. The beautiful cypress trees that lined the cool waters of the Blanco River are gone and the terrain is forever changed. The next heavy rain storm may cause those affected by the flood to look at the river with anxiety, uncertain of what may happen. But this community is strong, and we have come together for each other in a time of need and shown the world the resilience of a community, a county and a state.

I appreciate so much everyone who helped us during this time; through your actions, your kind thoughts and your warm hearts, we will recover. Thank you.

Lynn Burttschell  
TDEM

### **Researchers working on new mosquito repellent**

Researchers at Texas A&M University-College Station are working on a brand new mosquito repellent, and it's already in your skin.

Insecticides can be bad for the environment and bug spray doesn't always seem to work. That's why the researchers are focusing on microbes in our skin as a natural way keep mosquitoes from biting.

Jeffery Tomberlin of Texas A&M University says, "We know microbes play an important role in regulating mosquito attraction to a host and our idea is if we can disrupt the communication of the microbes that are on your skin or send false messages to the environment. We could either trick the mosquitoes into thinking you're a bad host, if we could send a false message or that they might not even detect you."

The plan is to develop a wipe that you would apply to your skin, it would trick mosquitoes into thinking you're not a good host.

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### **Save the Date:**

#### **2015 ALERRT Conference**

November 1-4, 2015

Embassy Suites Hotel and Conference Center

1001 E. McCarty Lane, San Marcos, Texas 78666

[Conference Information](#)

#### **Texas EMS Conference**

November 22-25, 2015

Kay Bailey Hutchison Convention Center

Dallas, Texas

650 S. Griffin Street, Dallas, Texas 75202

[Conference Website](#)

[Online Registration](#)

#### **Ninth Annual EMAT Leadership Symposium**

February 7-10, 2016

Embassy Suites Hotel and Conference Center

1001 E. McCarty Lane, San Marcos, Texas 78666

[Emergency Management Association of Texas](#)

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ASSISTANT DIRECTOR/CHIEF

W. Nim Kidd

DEPUTY ASSISTANT DIRECTORS

Paula Logan

Tom Polonis

Sandra Fulenwider

EDITORS

Suzannah Jones

Mike Jones

GRAPHIC DESIGNER

Mike Jones

WEBSITE

DPS Web Team

CONTRIBUTORS

Meteorologist Aaron Treadway, National Weather Service, New Braunfels, TX

Lynn Burttschell, TDEM

Jason Dush, TDEM

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Texas Division of Emergency Management and as noted.