

# Times Standard

## **Not My Fault: Hurricane Helene highlights the importance of pre-event planning, and public awareness**

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*Ryan Derby, Humboldt County Office of Emergency Services coordinator, opens Disaster Con at the Blue Lake Rancheria where North Coast emergency managers and responders talk about coordinated response to future floods, earthquakes, tsunamis, and other disasters.*

It takes a community to weather the assaults of storms, floods, earthquakes, tsunamis, wildfire, and other disasters. Today the news spotlight is on the Big Bend region of Florida and the southeastern U.S. as hurricane Helene made landfall and moved north. The current loss tally is 53 deaths and \$20 billion in damages. As I write, a dam break in eastern Tennessee appears imminent. Losses will certainly rise as the storm continues to unleash strong winds and record rainfall.

Helene illustrates the damage a category 4 hurricane can wreak on populated areas. Not as clear in the headlines is the complexity of responding to a widespread disaster and how years of pre-event planning and resilience efforts reduces losses. From the satellite and instrumental infrastructure that monitors weather, to the actions of individuals in harms way, it takes coordination and community awareness to reduce impacts and recover.

Government institutions like the National Hurricane Center and regional weather stations played a major role in tracking Helene from its earliest genesis in the Atlantic on September 17<sup>th</sup> through its trajectory in the Caribbean and the Gulf of Mexico. The National Hurricane

Center nailed both the magnitude and landfall location and continues to advise the region in Helene's post-tropical cyclone phase.

The storm projections allowed the Federal Emergency Management Agency (FEMA) to coordinate with states and communities to preposition resources. States, counties, and cities had the time to develop an action plan for evacuations and the Red Cross could establish shelter locations and move personnel into the area. Heavy equipment and operator personnel were lined up beforehand and debris removal plans put in place.

The pre-planning didn't start on September 17<sup>th</sup> when Helene was a newborn or on September 24<sup>th</sup> when the winds became strong enough to become a named storm. The tracking and analysis infrastructure has been in place for decades and all U.S. states and counties have disaster response plans and conduct drills on how to respond when a real event occurs. For the system to function, local, state, and federal organizations need to constantly fine tune and exercise their plans.

I used to teach a Natural Hazards class at Humboldt. The first day of class we talked definitions. An emergency is something that requires a response that local resources are capable of dealing with. Some emergencies can be deadly and very costly but local fire, public safety and medical institutions can handle the response. A disaster is an event that is too big for local resources to handle and requires outside assistance – from neighboring counties, neighboring states, and if large enough, from the federal government.

Government and official organizations are not the only players in responding to disasters. The most exhaustive planning is of little use if people aren't engaged in the process and don't understand what they need to do in case of a hurricane or other disaster. Everyone – and that includes YOU – has a role to play. Government structures and official responders can't prevent damage from a major hurricane, earthquake, wildfire or other event and can't keep you out of harms way if you don't know what to do.

Education, communication, and taking appropriate action are key. In the case of a hurricane, basic terminology about what a hurricane is, how it develops and moves, and the multitude of hazards it can pose are key. Response will differ depending on where you are. Most important is finding a trustworthy information source before the hurricane hits. Officials advise areas to evacuate from and where you should be safe to shelter in place. If you aren't plugged into a communication network while infrastructure is still intact, you may find yourself in an information abyss when the largest impacts occur.

I'm glad we don't have a hurricane threat on the North Coast. But we have other natural hazards quite capable of producing as much or more damage and impacting equally large areas. I put floods and earthquakes at the top of the list in terms of regional impact with wildfires and tsunamis close behind. All of these events have unique characteristics and differ from hurricanes. But they also have much in common and the process of preparing for our potential disasters is essentially the same – identify the threat, create a toolbox of tactics to reduce impacts, develop response and recovery plans, drill and exercise with response partners, and communicate with everyone.

Our area is prone to natural hazards and the last decade has provided wildfires, earthquakes, floods, and several modest tsunamis. These disasters put a strain on the modest economies of our rural counties and absolutely hammer the transportation infrastructure. But on the positive side, we don't have the awareness problem of many other areas, and I've met very few people who don't consider preparedness important.

I attended Humboldt County's Disaster Con last week. Formerly focused just on tsunamis, this year's event for emergency planners, managers, responders, and everyone with a role in response expanded the focus to include flooding and other disasters. It made sense as 2024 marks 60 years from two of the worst North Coast disasters of the past century – the great tsunami spawned by the Great Alaska earthquake, and the Christmas floods.

Much of the focus of Disaster Con was changes between 1964 and today and how the impacts and response might be different now. We have no way to reduce the size of a tsunami or the height of flood waters. But we do have better forecasting tools, an emergency management structure, emergency response communication, plans in place for mutual aid, and a clear role for the State and Federal Government in providing response coordination and assistance afterwards.

But there is one area where we may lag behind 1964 – public communication. In 1964 almost everyone had a TV and watched one of three broadcast stations. It was easy to reach most people by providing information through these channels and the vast majority considered such announcements to be valid and worthy of responding to. Not so true today where even the issue of what is fact may be debatable. People get information from disparate sources and some silo themselves away from all news. It is easy to think that because my house or workplace was not impacted by a past flood or quake that I will be ok next time around – not necessarily true.

Ultimately, your safety depends on taking the right actions. In the case of a hurricane, that could be evacuating days before impact. The potential impact of winter storms and floods is usually clear a day or two beforehand. For a tsunami coming from Alaska or Japan, that window may be only hours. If you've got an earthquake warning APP on your phone, you might have only a few seconds before you feel strong shaking – only enough time to Drop, Cover, and Hold On, or freeze on one spot.

Which brings me back to ShakeOut this October 17<sup>th</sup>. No one will be around to protect you when the ground starts shaking in our next major quake. But you can develop the muscle memory to do the right thing and minimize injuries to yourself and loved ones. Take a moment to learn more at <https://rctwg.humboldt.edu/great-shakeout>.

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Lori Dengler is an emeritus professor of geology at Humboldt State University, an expert in tsunami and earthquake hazards. The opinions expressed are hers and not the Times-Standard's. All Not My Fault columns are archived online at <https://kamome.humboldt.edu/taxonomy/term/5> and may be reused for educational purposes. Leave a message at (707) 826-6019 or email [Kamome@humboldt.edu](mailto:Kamome@humboldt.edu) for questions and comments about this column or to request copies of the preparedness magazine "Living on Shaky Ground." Digital copies are at <https://rctwg.humboldt.edu/prepare/shaky-ground>.