

## Not My Fault: Tsunamis, fires and floods, oh my

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"Lions and tigers and bears! Oh my!" - the second most famous line from the Wizard of Oz. These three are the archetype of the scariest things that could pop out at you unexpectedly. For the North Coast, I could rephrase it as - tsunamis, fires and floods. Oh my indeed.

These are the big three – the events that could pop up in the middle of the night, on a sunny afternoon or in the midst of a winter storm that require quick action on your part. You may need to evacuate on a moment's notice to survive. It may be just a coincidence that all three are recognized this month. Fire Prevention Week was two weeks ago, followed by ShakeOut and Tsunami Week, and this week California spotlights Flood Preparedness. It makes sense to think about what they have in common and how they differ.

Mitigation is the broad term used to address actions people can take to reduce risk. All mitigation efforts begin with understanding the threat. What areas are at risk and which are safe? How quickly does the threat materialize and spread? What indicators are there that a dangerous situation is developing and can they be detected remotely?

For tsunamis, it's Know Your Zone – the tsunami zone that is. The coast is at greatest risk and we are fortunate that most of the populated North Coast areas are out of the danger area. Entering/Leaving Tsunami Zone signs on local roads are a visual cue of where you need to go to be safe from a Cascadia tsunami - the largest tsunami threat to the area. Earthquake shaking that lasts a long time is your first indication a nearby tsunami could be coming in as little as ten minutes. The official tsunami warning system will alert you to a potential tsunami from far away, and will typically give you a three hour or more heads up. There is no season to tsunamis – they can occur at any time and in any weather.

Fire is a very different beast than tsunamis. It's typically a dry weather phenomenon, but the fire season has become longer with climate change. Major wildfires are not just an inland problem but can strike anywhere. We were fortunate that the fire near Blue Lake on October 8th started around 5 pm and local fire crews were able to

contain it so quickly. Five hours later, many of those responders would have been headed south and our fire might not have been so quickly contained.

We were not so fortunate in 1908 when much of Humboldt County was ablaze. "From Trinidad to Fieldbrook terrible and destructive forest fires are raging unrestrained," the Humboldt Times proclaimed. In October 1945, the Times describes, "cinders falling like confetti in Eureka," from a fire that raged on both sides of 101. Historian Jerry Rohde tells me you can still see a burnt snag from the '45 fires at the 101 Northbound Rest Area just north of Trinidad.

As frightening and unpredictable as fires seem, we are not helpless. The threat can be reduced by clearing away combustible materials and maintaining at least 100 feet of defensible space around your home. Plan two ways out.

Learn more by attending a community wildfire workshop. The first one is tonight at 6 pm at the Kneeland Elementary School. Find out about workshops in your community at http://www.humboldtgov.org/689/Fire-Safe-Council. Get a Northern California fire safety magazine, at

http://humboldtgov.org/DocumentCenter/View/59108. If you prefer to talk to a human, call (707) 267-9542 to request a copy and find out about workshops in your area.

It's hard to think of flooding with record temperatures hitting much of the state. Humboldt County is 35th in population among California's 58 counties, but ranks in the top five for declared disasters. The most common? Flood/winter storm events. Our floods are caused by atmospheric rivers, a narrow filament of concentrated moisture that can bombard the region for days or even weeks of heavy precipitation.

In contrast to tsunamis or fires, an atmospheric river can be observed forming days before it hits. This gives the luxury of a little more time to see the event materialize and forecast likely impacts. But changes in the direction and speed of a weather system, the dynamics of warm and cold fronts interaction and localized conditions can mean sudden changes in winds and precipitation intensity. That means you may need to evacuate quickly from areas prone to urban or riverine flooding.

No matter what the threat, make sure you have signed up to receive emergency notifications — call your local Office of Emergency Services for details. And have a 'Grab and Go kit' for everyone in your family with emergency supplies and copies of important documents and medical information. There may be "no place like home," but sometimes you need to get out quickly.

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 $\underline{http://www.times-standard.com/opinion/20171025/tsunamis-} \underline{fires-and-floods-oh-my}$