

Not My Fault: Not My Fault turns five

Lori Dengler/For the Times-Standard
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<https://www.times-standard.com/2021/12/05/lori-dengler-marking-five-years-of-quake-education/>

It's been a busy few months. I've become involved with a new project to better understand the Gorda plate and we've had visitors for the first time since the pandemic started. An anniversary last month completely slipped my notice. Someone asked me how long I had been writing this column and was surprised that it has been five years.

My inaugural column was November 5, 2016. I used that occasion to write about my first North Coast earthquake experience, the November 5, 1980, magnitude 7.2. 225 columns later, I've covered a lot of ground. I usually "stay in my lane," writing about subjects that I know well. But sometimes I get intrigued by a newsworthy event like Mars probes or the final closure of the PG&E Humboldt Bay Power Plant and veer a little into unfamiliar ground.

My intent has always been to give you a taste of why I became so hooked on earth sciences and how it continues to provide chapter after chapter of extraordinary stories. I also hope that the information gives you tools to prepare for any earth-shaking events that come your way. Knowledge is the first step in preparedness, and if my writing has produced discussions at home or in the workplace, it has accomplished my goal.

Last month, Fields Landing became the North Coast's ninth TsunamiReady community. In the spirit of this recognition and the five-year marker, I will elaborate on what this does and doesn't mean.

TsunamiReady is a program developed by NOAA and the National Weather Service in 2001 to promote community resilience measures

(<https://www.weather.gov/tsunamiready/>). Modeled on the StormReady program, it emphasizes education, outreach, and infrastructure for communities to understand natural tsunami warnings, receive official warnings, and plan for successful evacuations of vulnerable areas.

In 2002, Crescent City became one of the first communities in the nation to become TsunamiReady and Del Norte

County continues to be a leader in taking tsunami preparedness efforts. The County held California's first county-wide evacuation drill in 2010, a tsunami walk with information kiosks and pre-pandemic outreach events with businesses and schools.

TsunamiReady is most often recognized at the community level, but counties, Tribes, National Parks, universities, and other organizational entities are also eligible. To become TsunamiReady, the community works with the regional National Weather Service forecast office. Requirements include 24-7 capability to receive and disseminate warnings from the National Tsunami Warning Center, widely accessible tsunami hazard maps and defined evacuation routes, tsunami zone signs posted on roadways, response plans, annual exercises, and sustained education and outreach.

The Fields Landing TsunamiReady application took a little longer than usual to be completed. Our North Coast approach always begins at the community level. Kathy Moley and Maurice Viand, both longtime Redwood Coast Tsunami Work Group (RCTWG) members and Fields Landing residents, and NWS Warning Coordination Meteorologist Ryan Aylward began the planning effort in 2019. Developing the tsunami plan and coordinating the community evacuation drill required input and coordination with many additional agencies including California Geological Survey, Caltrans District 1, Humboldt Transit Authority, County and State OES, Humboldt Amateur Radio, and PG&E.

Full-scale evacuation drills are the cornerstone of North Coast tsunami preparedness, and it is important to plan for any possible contingency. If evacuation routes require crossing roads and highways, safety monitoring must be in place. Efforts are made to reach every community member ahead of time so that no one is surprised if they hear sirens or other public notifications that the drill has begun. Non-English-speaking communities and those with mobility and other physical challenges must be included. In addition to officials, many volunteers are needed to help direct participants and answer questions.

The Fields Landing drill was part of our October 2019 ShakeOut activities and normally, the official TsunamiReady recognition would have been made soon after. But nothing was normal in early 2020 as the pandemic loomed. Procurement and installation of tsunami signs was put on hold. It wasn't until after this October's Fairhaven evacuation drill that we realized Fields Landing was still pending. On November 22, we finally corrected the omission.

TsunamiReady does not mean that a community has no tsunami vulnerability. A better term would be “tsunami beginning to be ready” as the recognition is only a starting point. Fields Landing, like many communities on the North Coast, is vulnerable to both tsunamis coming from far away and close by. Distant tsunamis like those coming from Chile, Japan, or Alaska, have the advantage of time – time to issue official warnings and for a coordinated evacuation to be put into effect. But communities and individuals still have the responsibility to understand the warnings and how to evacuate if needed.

It’s the near source tsunami threat that requires more vigilance and effort on your part. Sometime in the next twenty, fifty or one hundred years, the Cascadia fault system will produce a great earthquake. That fault rupture will be at least several hundred miles in length and pass only miles beneath your feet. It will generate a tsunami that could arrive in as little as ten minutes along our coast. Residents of Fields Landing and other North Coast communities won’t have the luxury of Emergency Alert System announcements or public safety officials knocking on their doors. They must recognize that the earthquake will likely be their only warning; that feeling an earthquake that last longer than any earthquake they have ever felt before is the signal to evacuate.

Drills are the best way to develop the muscle memory to evacuate on short notice. We are in the early stages of planning a Manila to Samoa evacuation drill on the Samoa Peninsula for next March. Any community members who would like to be involved with that effort can contact me or Humboldt OES. And in June, Del Norte County hopes to hold its third county-wide drill.

A thankyou to all of you who read this column. I’ve learned a lot these past five years and I hope you have too. Feedback to me or this newspaper is always welcome.

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/resources> and may be reused for educational purposes. Leave a message at (707) 826-6019 or email rctwg@humboldt.edu for questions and comments about this column, or to request a free copy of the North Coast preparedness magazine “Living on Shaky Ground.”