Times Standard

Not My Fault: Tsunami resilience really does begin with you: World Tsunami Day is the time to KNOW YOUR ZONE

Lori Dengler for the Times-Standard.
Posted October 31, 2026
https://www.times-standard.com/2026/10/31/lori-dengler-tsunami-resilience-really-does-begin-with-you/



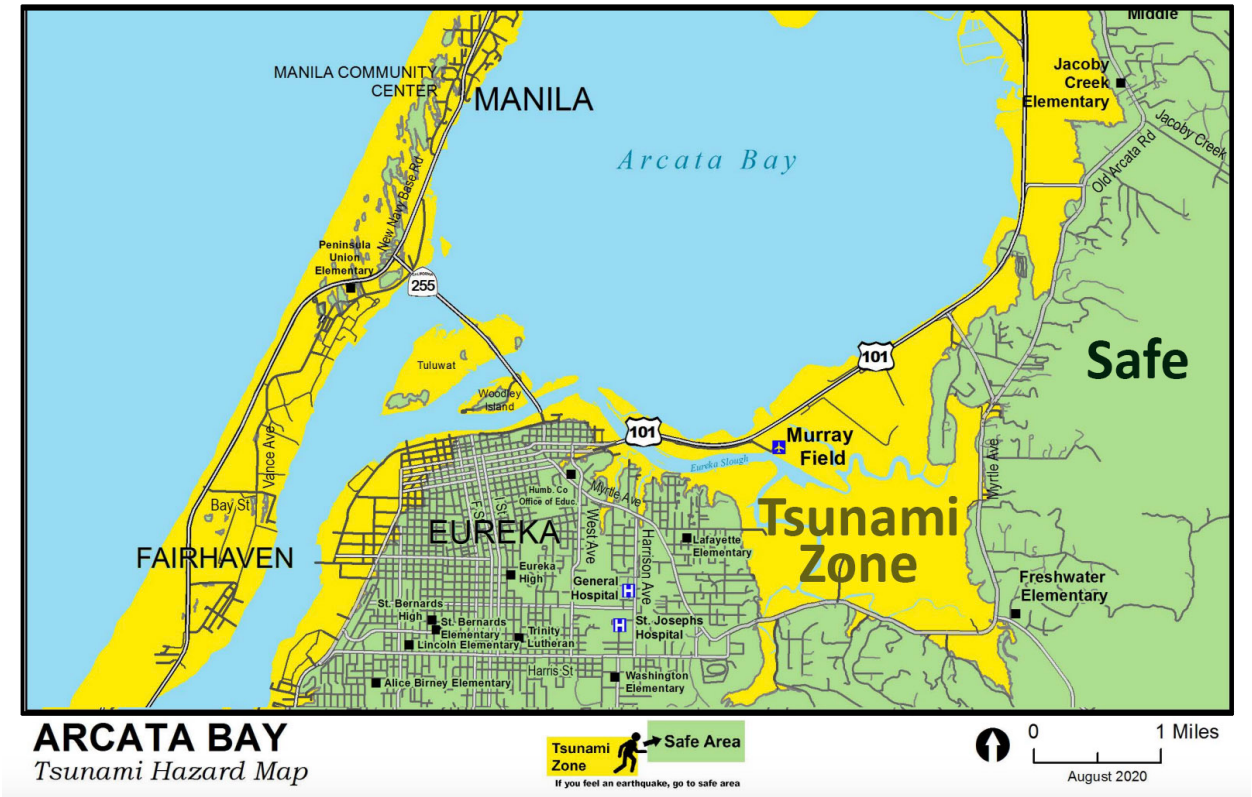
One of the simplest ways to learn if you are in a tsunami zone is to look for posted ENTERING and LEAVING Tsunami Zone signs. Most public roads and highways in North Coast California have posted signs that correspond to the mapped tsunami zone for the largest tsunami likely to affect our area, a magnitude 9 earthquake on the Cascadia subduction zone.

Thursday November 5th is United Nations World Tsunami Awareness Day. This year's theme is "Be Tsunami Ready: Resilience Starts With You." For anyone living, working, or visiting in coastal areas, that means a specific YOU and not a generic one. No government system, and no amount of engineering can assure your safety without you being an active participant and understanding the tsunami threat. Like wildfire and hurricanes, you need to take action fast when evacuation is called for. But unlike those other hazards, you may have to make the decision to head inland or to higher ground in the midst of a chaotic earthquake experience with no official guidance.

If you read no further, please take a moment to learn whether you live, work, or recreate in an area where a tsunami might reach. You may be relieved to learn that most of our area is either too high or too far from the coast to be affected by even the largest tsunami that could hit us. The California Geological Survey makes our tsunami maps. See the note at the bottom to learn more about how they are made and find maps of your area. Four main takeaways:

• These are WORST CASE maps and for North Coast California, are based on a magnitude 9 earthquake on the Cascadia subduction zone
• Areas in green are SAFE, stay put unless fires or other hazards arise
• Areas in yellow MAY be at risk so plan and practice an evacuation route (preferably by foot) on how to get to the green zone

• The worst-case earthquake will shake the ground for a long time, and it is your warning to quickly head to a safe area – phones won't work so don't expect any official to tell you what to do



This is the California tsunami hazard map for the Eureka and Samoa Peninsula areas. Areas in GREEN are safe from surges caused by a magnitude 9 earthquake on the Cascadia subduction zone, the largest tsunami that might hit the region. If you live, work, or visit the YELLOW areas, all bets are off, and you should plan to evacuate BY FOOT to an area in yellow if you feel an earthquake that lasts a LONG TIME, typically a minute or more. If a tsunami WARNING is issued following a major earthquake far away, or a local earthquake in the magnitude 7 range, most of the yellow zone is safe and only beaches, harbors and low areas near the Bay are at risk. In a green area, stay where you are. For other regional tsunami maps, go to https://rctwg.humboldt.edu/tsunami-hazard-maps.

Tsunami Awareness Day was proposed by a Japanese delegation to the United Nations following the 3rd UN World Conferences on Disaster Risk Reduction in 2015. Japan has always been the global leader in disaster risk reduction strategies and sponsored all three UN conferences. The third conference was held in Sendai in 2015, a region hard hit by the 2011 Great East Japan earthquake and tsunami. The conference produced the Sendai Framework for Disaster Risk Reduction, a blueprint for reducing disaster deaths and increasing participation in risk reduction activities throughout the world.

World Tsunami Day was a direct outcome of the Sendai Conference and serves as the primary global advocacy campaign to implement its objectives. The Japanese delegation argued four core principles in their proposal to the UN:

• A "Forward-Looking" approach focused on mitigation success rather than tragedy
• Valuing "Indigenous and Local Knowledge" and emphasizing recognition of natural warning signs to encourage community response
• Using the "Bitter Expertise" of the Japanese people and drawing on their past experience in tsunamis to share disaster reduction efforts with other countries

• World Tsunami Awareness Day is the best way to draw attention to the new Sendai Framework and involve peoples all over the world in disaster reduction.

World Tsunami Day is a big deal in Japan. It's legally designated as Japan's official Tsunami Disaster Prevention Day and national government agencies, research institutes, prefectures and municipalities take part. Nationwide evacuation drills are held with all levels of government, national media, schools, and many businesses involved. At 10:00 AM this Thursday, the Fire and Disaster Management Agency will trigger a nationwide test of the J-Alert satellite system. Bullet trains will practice emergency braking protocols, and local municipalities will broadcast a tsunami test message on cell phones, television, and other notification channels. Many towns and cities will hold organized evacuation drills. This is a coordinated national effort, very unlike our scattered March tsunami week efforts in the U.S.

One of the cities that goes out of their way to hold tsunami outreach and education events is Rikuzentakata in Japan's Iwate Prefecture. Rikuzentakata was devastated by the 2011 tsunami and became the official sister city of Crescent City through the return of the small boat Kamome. This year, in addition to participating in the evacuation drills, Rikuzentakata is hosting a High School Students Summit inviting 99 students from 14 countries to learn about what happened in 2011 and participate in Disaster Prevention workshops focused protecting children, the elderly, and tourists.

The Disaster Prevention Institute (DPRI) at Kyoto University is one of the academic institutions that integrates cutting-edge hazards research into World Tsunami Day events. A colleague and frined of mine Jim Goltz is currently a visiting researcher at DPRI. Jim headed California's Earthquake and Tsunami programs for the Office of Emergency Services for many years and told me how Tsunami Day is used in Japan to test evacuation models and understand how bottleneck points form when people evacuate and how people respond to texts and signage.

Kyoto University is also the home of the Society for Integrated Disaster Risk Management (IDRiM), launched in 2009 to provide a permanent base for interdisciplinary international disaster risk reduction professionals. The group exchanges ideas through a professional journal and at an annual meeting. The topics are wide ranging from engineered "hard" mitigation efforts like seawalls to incentives like insurance, and a broad spectrum of outreach. Unlike many U.S. efforts, social scientists play a prominent role in all aspects of the disaster research.

I'm not a member of IDRiM and although I'm aware of some of the research articles, it's not a group I've been closely connected to. I was surprised to learn six weeks ago that I was the recipient of the Society's annual Norio Okada Implementation Science Award. Dr. Norio Okada is an internationally recognized engineer, founding president of the IDRiM, Professor Emeritus at Kyoto University, and former director of the DPRI. Not just an academic, he has stressed the link between theory and practice and researched the factors that promote or inhibit theoretical studies from being implemented to saving lives and reducing losses in the real world.

Although my name may be on the award, it's far more a recognition of the 30 years of Redwood Coast Tsunami Work Group efforts to build tsunami resilience on the North Coast. Dozens of people have been integral to that effort including professionals from academic institutions, local, state, and federal agencies, and preparedness groups. The backbone of the RCTWG has been volunteers from all walks of life, helping with fairs and other outreach activities, conducting surveys, and giving lots of feedback on if what we are doing makes sense. It's

working together to implement the best science of tsunamis that we have right now and trying everything we can think of to get organizations, families, and individuals aware of the threat. It's a never-ending effort and the proof of success won't be until the next major earthquake.

The Okada award has made me think about resilience in a slightly different way. A few weeks ago, in writing about disaster recovery, I noted the importance of semantics. In the U.S. we focus on disaster management while in Japan, the disaster reduction is front and center. We tend to be reactive instead of proactive and in recent years, have become more so.

The U.S. has distanced itself from United Nations Disaster Risk Reduction strategies. With the elimination of USAID in July 2025 and withdrawing from UN disaster reduction efforts like those stated in the Sendai Framework, U.S. disaster assistance is centered in the State Department on an event basis, targeted at regional alliances with conditional funding. The Council on Foreign Relations estimates U.S. financial support for all humanitarian assistance including disaster response has declined by at least 75% in the past two years.

Our official attitudes have changed internally as well. The "America First" National Resilience Strategy was introduced in 2026, formally eliminating several long-term recovery and specialized resilience planning groups within the Federal Emergency Management Agency (FEMA), and directing it to focus on managing response. The Pre-Disaster Mitigation Grant Program has been closed to new requests, but other FEMA programs including Hazard Mitigation Programs that become available after a Presidential Disaster Declaration is issued are still functioning but with considerable delays after successful court battles to prevent their elimination.

Post disaster triage is much easier if there are fewer victims and less damage. Many cost-benefit studies show the effectiveness of money spent now in building resilient structures, retrofitting aging or out-of-date systems, improving warning and communications systems, and taking the time and effort to understand the role of human behavior in exacerbating or reducing impacts. I really like this year's World Tsunami Awareness Day theme – tsunami resilience really does begin with you. Knowing your zone is a good starting point. But you can also make your voice heard by electing people who prioritize a prepared and resilient community.

Note: The California Geological Survey has the responsibility for assessing geologic hazards in the state including tsunamis. They use the most recent tsunami modeling tools, detailed maps of on- and offshore land and ocean bottom shapes, and potential tsunami sources locally and around the Pacific basin to construct their WORST-CASE maps. All the maps are based on high tide and include an additional factor of safety to account for the land level dropping several feet in a large earthquake. Maps are updated at least every ten years; our most recent maps were issued in 2020. Learn more about how the maps are made at https://www.conservation.ca.gov/cgs/tsunami/maps, North Coast maps can be downloaded at https://rctwg.humboldt.edu/tsunami-hazard-maps , picked up at the NWS forecast office on Woodley Island, or requested by email or phone at the contact below.

Lori Dengler is an emeritus professor of geology at Cal Poly Humboldt, and an expert in tsunami and earthquake hazards. The opinions expressed are hers and not the Times--Standard's. Not My Fault columns are archived online at https://rctwg.humboldt.edu/news-archive and may be reused for educational purposes. Leave a message at (707) 826-6019 or email Kamome@humboldt.edu for questions and comments about this column or to request copies of the preparedness magazine "Living on Shaky Ground."