

Q&A and Key Comments from Chat:

13:11:53 From Rick Wilson : Direct link to the Tsunami Hazard Area maps for evacuation planning: <https://www.conservation.ca.gov/cgs/tsunami/maps>

13:23:38 From James Caesar : Why is a tsunami called a harbor wave? The reason for the Japanese name "harbour wave" is that sometimes a village's fishermen would sail out, and encounter no unusual waves while out at sea fishing, and come back to land to find their village devastated by a huge wave.

13:28:02 From Mark Benthien (SCEC/ECA) : Know Your Zone, and register your Tsunami activities: <https://TsunamiZone.org/california>

13:28:13 From Mark Benthien (SCEC/ECA) : California Geological Survey Tsunami website: <https://Tsunami.ca.gov>

13:32:39 From Mark Benthien (SCEC/ECA) : Video about Tilly Smith: www.youtube.com/watch?v=E0yrONL1Q3g

13:34:22 From Rick Wilson : CGS and Cal OES put together an interesting "storymap" about the 2011 Great East Japan (Tohoku) earthquake and tsunami with impacts in Japan and California: <https://storymaps.arcgis.com/stories/d230982eb75940ee97aee715057072f1>

13:39:45 From Traci Olson To All Panelists : Podcast - Ready to Recover - <https://crew.org/audio/>

13:41:08 From Traci Olson To All Panelists : <https://www.fema.gov/about/news-multimedia/podcast> FEMA Before During & After

13:44:00 From Traci Olson : Podcast - Get Ready Alaska - Dept of Homeland Security & EM <https://alaskadhsem.podbean.com/>

13:45:22 From Traci Olson : Podcast - Disaster Zone by EM <https://disasterzone.buzzsprout.com/>

13:46:49 From Traci Olson : Podcast - Disaster Tough <https://www.thereadinesslab.com/disaster-tough>

13:48:19 From Traci Olson : Podcast - Homeowner Be Aware includes disaster <https://homeownersbeaware.com/>

13:51:13 From Traci Olson : <https://dwellsecure.com/> Phone App to include all info about your home (water & gas shutoff valves, irrigation, maintenance schedules, etc.).

Can save links, photos, videos, invite others to share info too. Creator hopes to connect with inspectors and responders with info. He has 25 years fire dept experience.

13:51:58 From Roy Tuason : I'm told by the meeting hosts that this Zoom chat content will be distributed / available. I am taking meeting notes and copying in from this Zoom chat. It's in a Google docs and I've shared it available to all with this link. These notes are **not** official. They are my personal notes. Google docs link: <https://docs.google.com/document/d/1gtE7ID1mERFRLNna9IRbhMSYBuxmuRRLhfdMkCkYGso/edit?usp=sharing>

14:01:20 From Rick Wilson : The State of Oregon has done some work with signage and the "blue line" projects for tsunamis: https://www.oregon.gov/oem/Documents/Tsunami_Evacuation_Signage_and_Wayfinding_Guidance.pdf

Written Responses in the Q&A Section (Answered by Webinar Presenters)

Anonymous Attendee

What is a "rogue wave"? How does it differ from a tsunami?

Rogue waves are unpredictable extreme storm waves that can arrive unexpectedly along the coast. Even though tsunamis can't be predicted (just as we can't predict earthquakes), we can estimate tsunami arrival time and size when distant source tsunami events occur.

Stacy Weller

Can you tell where a tsunami will occur by where the earthquake takes place?

Hi Stacy. The National Tsunami Warning Center has a number of precomputed tsunami simulations all across the Pacific (ring of fire). Depending on the initial earthquake location, magnitude, and depth, the NTWC can estimate the tsunami characteristics. If a tsunami was generated, there are DART buoys offshore that can detect a tsunami and help refine the warning centers estimate of the tsunami. Offshore in deep water, a tsunami may only be centimeters high (barely noticeable). Interesting right?!

Anonymous Attendee

How big of an earthquake causes a tsunami?

Like many answers, it depends. The largest tsunamis are caused by subduction zone earthquakes (M8-9). However, a small earthquake close to the coast may trigger an offshore landslide that can generate a local-source tsunami. Remember, if you're at the coast and feel a long or strong earthquake, move to high-ground or inland as soon as you're able. Long and strong, get gone. ;)

Larry Goldberg

There is a rumor from tribal sources that Humboldt Bay was literally created in one day in the 1700 earthquake. Could this be possible with subduction?

Subduction zone earthquakes, like the Cascadia subduction zone offshore of Humboldt, can cause permanent uplift and subsidence (down-dropping) of the land. So yes, subduction can cause permanent drowning of coastal land, as we saw in Japan post-2011 event and other large events around the world.

Thomas Grieder

I know that I should get to the highest possible ground, but is there a recommended minimum altitude (feet above sea-level) for an evacuation site?

You don't have to get to the highest possible ground; just outside of the Tsunami Hazard Area. In a real event, follow instructions from local officials. To understand where you need to evacuate ahead of the next tsunami, go to tsunami.ca.gov/maps and locate where you live, work, or play along the coast. We don't have a minimum altitude because we don't use a bathtub tsunami model. In some areas, that elevation may only 20ft but other locations may be much higher (e.g., northern CA). In short, use the tsunami evacuation map to plan ahead of time.

Adam Shephard

What is the minimum height to get to

We don't recommend a minimum height; rather, use the tsunami hazard area maps to determine where you'd need to evacuate. Check out tsunami.ca.gov/maps to see where your hazard areas are located.

George Flores

Do builders, insurers, and real estate transactions have to declare property on the coast by level of tsunami risk?

Hi George! There are certain hazards that need to be declared with real estate transactions, including earthquake, landslide, and flood zones. We are working with lead agencies to have tsunami listed among these types of geologic hazards. It's on our list to-do!

Larry Goldberg

Tsunami warning sirens were installed along ocean-front beaches in Humboldt, but were eventually found to have failed during recent Tsunami test drills. Will they be replaced?

Hi Larry: The sirens are funded locally. It is up to the local cities and counties if they want to replace the sirens.

Ivan Rodriguez

Also TorranceNOW Sirens recently tested Beach Emergency Evacuation Lights System (BEELS). Ventura County currently looking at the BEELS Concept.

The BEELS is a very new and interesting system. I have more info on that if interested.