

# Tsunami Preparedness Week - EXERCISES

## March 20-26, 2016

### Tsunami Warning Communications Test (3 County OA's)

- Weds, 3/23/16 (**11:00** PDT)
- NOAA Press Release (via Twitter, Facebook, USA Today)

### Required Monthly Test (RMT)

- Weds. 3/23/16 (**10:15** P
- NOAA Press Release (via Twitter, Facebook, USA Today)



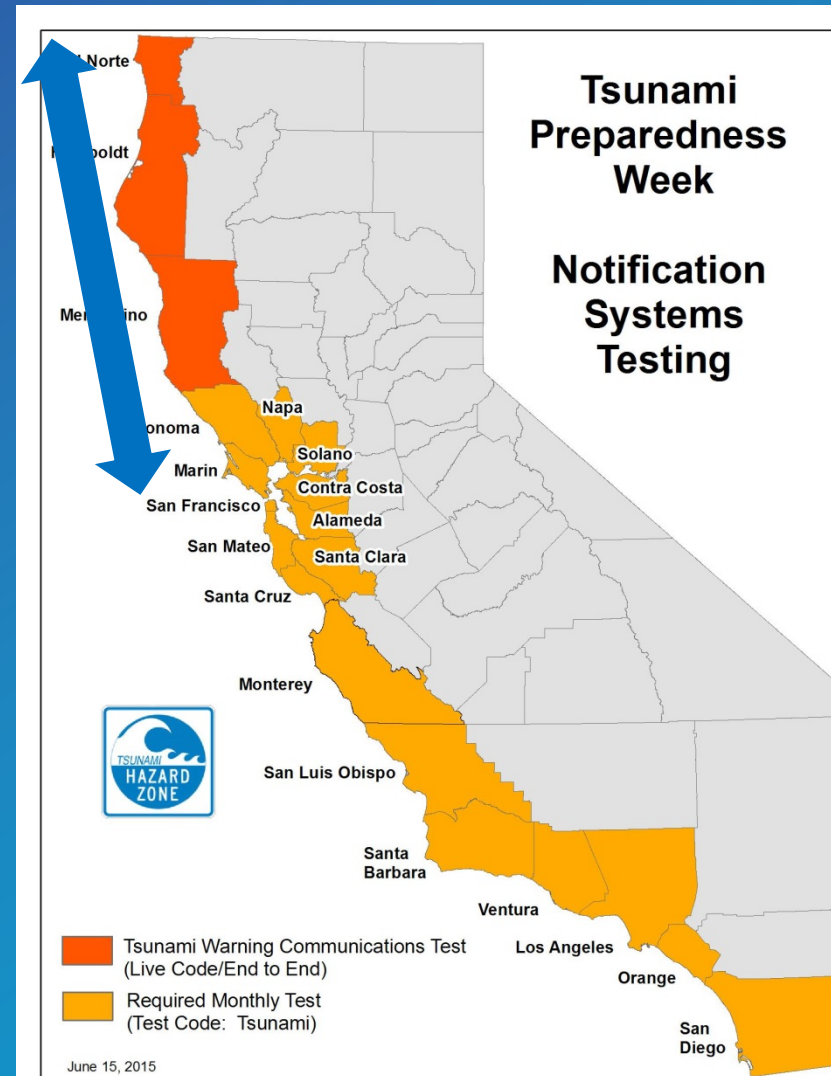
### Air Ops On-Board Audio Testing

### Playbook Communications Drill (20 County OA's)

- Weds. 3/23/16 (**14:00** PDT)
- State to County Conference Call

### Local Exercises:

- Scenario?
  - Tabletops, Informational, Functional
- PacifEX16 = Cascadia Rising NOAA-sponsored Exercise (NTWC)



# Tsunami Preparedness Week 2016 Activities

- Local preparedness efforts
- Community Outreach
- Local Brochures / Videos developed
- Progress toward TsunamiReady criteria (e.g. Signs, Warning Point, Planning, Outreach)
- Tsunami Work Group Meetings
- Exercises / Drills / Street Fair
- Media Events / Website / Social Media
- Workshops / Training / Courses (planned/needed)
- Planning updates (Response, Evacuation ConOps, Annex, LHMP)





# FREE STUFF!

## The March 11, 2011 Tohoku Tsunami In Japan and California

### TSUNAMI IN JAPAN:

A magnitude 9.0 earthquake off of northeastern Honshu Island caused a massive tsunami that first arrived on-shore within 20-30 minutes after the earthquake. The tsunami measured 50-feet high at the coast along the Sendai Plain with a maximum run-up to an elevation of 150 feet at Araiuchi Bay.

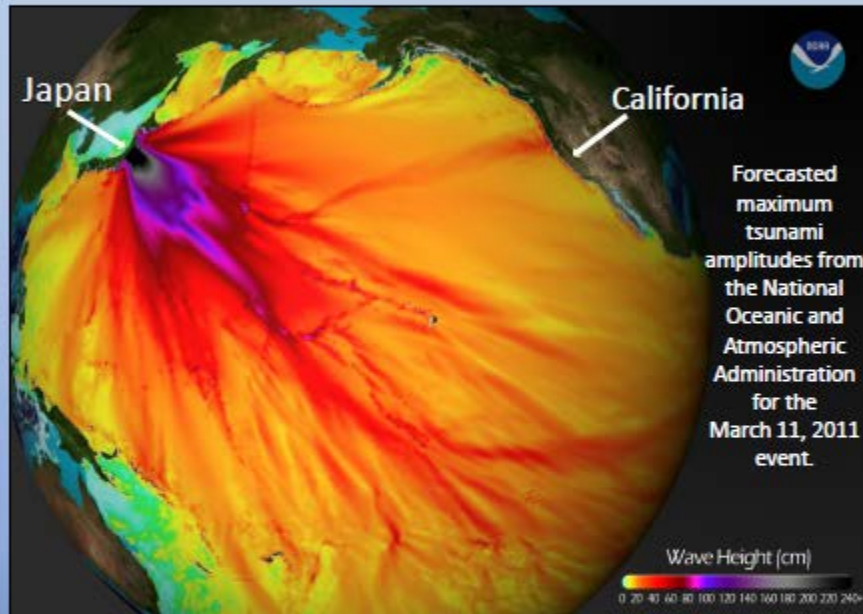


### IMPACTS IN JAPAN:

Tragically, although 200,000 people successfully evacuated, over 10,000 people were killed or remain missing in Japan because of the tsunami. The Fukushima Daiichi Nuclear Power Plant suffered a catastrophic meltdown causing long-term radiation problems. The World Bank estimates the earthquake and tsunami was the costliest natural disaster in world history at \$235B.

### RECOVERY IN JAPAN:

After several years, communities have started to rebuild using coastal setbacks, raised land, and other engineered, protective measures. Significant segments of the impacted population have moved to other regions and will likely not return. Large portions of the Fukushima Prefecture will not be repopulated because of the nuclear disaster.



### TSUNAMI IN CALIFORNIA:

Ten hours after the tsunami was generated in Japan, the trans-Pacific tsunami reached the California coast. The largest tsunami wave heights were eight feet in Crescent City. Although only very localized on-land flooding occurred, strong coastal currents in and around harbors and bays were significant.

**IMPACTS IN CALIFORNIA:** One person was killed and 27 harbors sustained a total of \$100M in damages. In particular, all docks in Crescent City and Santa Cruz harbors were damaged or destroyed by strong tsunami surges lasting more than 24 hours. A major disaster declaration was issued in the state by President Obama.

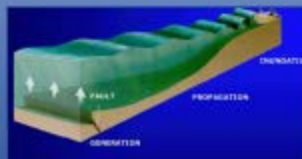


### RECOVERY IN CALIFORNIA:

Sedimentation, environmental issues, and damage inside several harbors delayed rebuilding efforts by several years. Larger piles and stronger docks were required in harbors like Crescent City and Santa Cruz to make them more "tsunami resilient" in future events.

### What is a Tsunami?

- Tsunamis are long ocean waves which are caused by a displacement of the ocean surface, commonly initiated by large underwater earthquakes.
- Tsunamis grow in size near shore because the water shallows.
- Tsunamis form a series of waves which can be very large in the near-source region (like in 2011 in Japan).
- Dangerous conditions can include swift moving flooding, strong currents and large eddies, and viscous sediment-laden water. They cannot be surfed.



### Preparing for a Tsunami

- First, review information about the tsunami risk to coastal areas you live, work, or visit.
- Become familiar with your local evacuation plan and practice evacuating to become familiar with your evacuation route.
- For local events, watch for "natural warning signs" like feeling a large earthquake, hearing abnormal ocean roar, or seeing the water recede, and get to high ground immediately. Any one sign could be an indication of tsunami danger.
- Follow the instructions of the local emergency managers.

### For More Information

[www.tsunami.ca.gov](http://www.tsunami.ca.gov)  
[www.tsunamizone.org](http://www.tsunamizone.org)



All photos by Rick Wilson or with their written release of the tsunami activity and impacts from the March 11, 2011 event. Cover image credit: Japan Pacific Tsunami Warning Center (photo taken from the National Tsunami Warning Center for the March 11, 2011 event).  
The image at the bottom is from Ocean Academy of Science illustrating tsunami generation, propagation, and inundation.

[Register Here!](#)

[Know Your Zone](#)

[Who is Participating?](#)

[How to Participate](#)

[Resources](#)

[News & Events](#)

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## WELCOME TO THE TSUNAMIZONE IN CALIFORNIA!

California's 2016 Tsunami Preparedness Week is March 20 - 26. Join us by [registering](#) your tsunami preparedness activities!

What will you do in your home, organization, or community this year? Participating is a great way for [your family or organization](#) to "[know your zone](#)" if you live, work, or visit near the ocean (or may visit), and to learn what to do to be safe.

*Event organizers: If your activity is open to the public or a potential news venue, please complete our [Event Form](#).*

### Media Contact:

Greg Renick, Information Officer  
[California Governor's Office of  
Emergency Services](#)  
Phone: (562) 795-2941

**Over 71,000**  
California participants  
and counting!

Click the map for  
details about each area



## CALIFORNIA EVENTS

A list of TsunamiZone events will appear below.

*Coming Soon*

[Add an event to the California calendar.](#)

**By registering tsunami preparedness activities, you or your organization will:**

- Be **counted** as a TsunamiZone participant!
- Be **listed** with other participants in your area (Optional)
- Be an **example** that **motivates** others to participate & prepare
- Have **peace of mind** that you, your family, your co-workers and millions of others will **be better prepared to survive and recover quickly** when a tsunami occurs.