



# ECA Southern California

## Fall 2025 Workshop

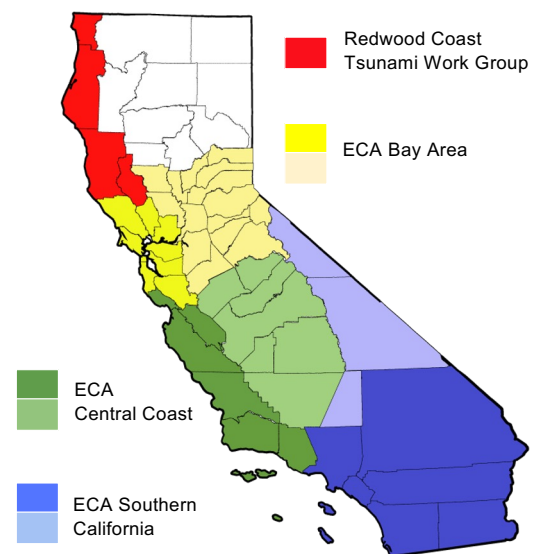


December 10, 2025

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## Earthquake Country Alliance

- 4000+ *Public-Private-Grassroots* leaders
- Statewide *committees* develop resources and deliver programs
- *Regional Alliances* organize meetings and outreach activities
- California's Office of Emergency Services provides FEMA NEHRP funding for ECA earthquake mitigation activities
- USC's Statewide California Earthquake Center (SCEC.org) administers ECA



Join: [EarthquakeCountry.org/join](https://EarthquakeCountry.org/join)



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# Co-Chairs, ECA SoCal Coordinating Committee

**Margaret Vinci**

Manager, Office of Earthquake Programs,  
Caltech/ShakeAlert

**Alan Hanson**

Simpson Strong-Tie, retired

**EarthquakeCountry.org/socal**

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## ECA SoCal Coordinating Committee

Coordinating Committee Chairs:	<b>Alan Hanson (Simpson Strong-Tie)</b> <b>Margaret Vinci (Caltech)</b>
Media Bureau Coordinator:	<b>Mimi Teller (American Red Cross Los Angeles)</b>
Participation Bureau Coordinator:	<b>Pei Lee (Orange County Emergency Management)</b> <b>Positions available for each county</b>
Events Bureau Coordinators:	<b>John Hammett &amp; Lance Webster</b>
ShakeOut Day Event Coordinator:	<b>Open position</b>
Quarterly Workshops Coordinator:	<b>Open position</b>

**Join Us! Email [socal@earthquakecountry.org](mailto:socal@earthquakecountry.org)**

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# Brief Self Introductions

**Name**

**Organization or Community**

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## Today's Agenda

### **AltaSea Welcome and Overview**

Robin Aube (Director of Advancement for AltaSea at the Port of Los Angeles)

### **Overview of Emergency Management at the Port of Los Angeles**

Lynette Ursery (Emergency Management Coordinator, Port of Los Angeles)

### **Recent SoCal Earthquakes**

Margaret Vinci (Manager, Office of Earthquake Programs, Caltech/ShakeAlert)

### **BREAK**

### **Your Action Plan for the Seven Steps to Earthquake**

Mark Benthien (Statewide California Earthquake Center & ECA Executive Director)

Margaret Vinci (Manager, Office of Earthquake Programs, Caltech/ShakeAlert)

Alan Hanson (Simpson StrongTie, retired)

### **ECA Activities & Opportunities**

Mark Benthien (SCEC/ECA)

### **Attendee Announcements and Sharing**

### **Adjourn**

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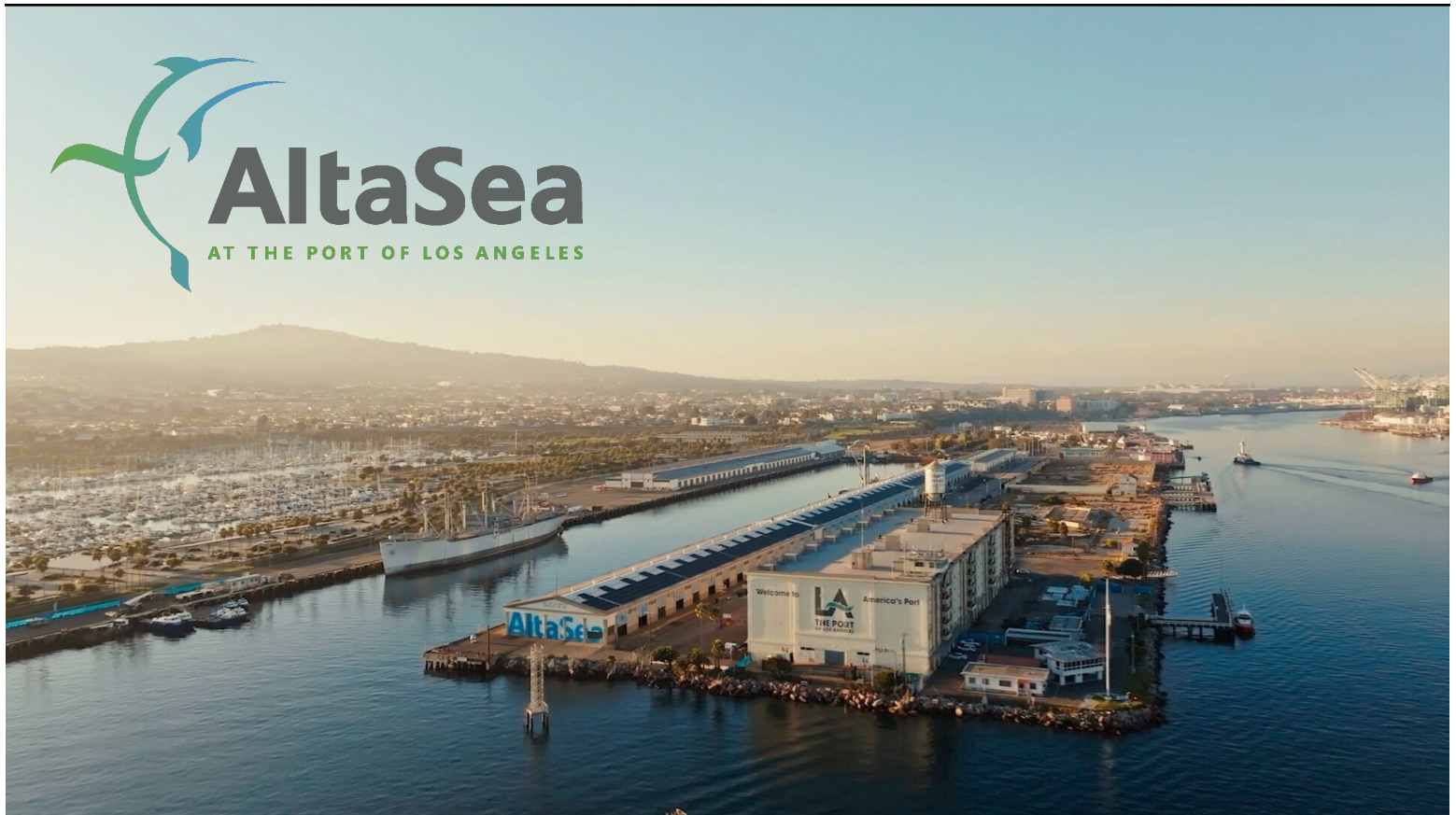
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# AltaSea Welcome and Overview

Robin Aube  
Director of Advancement for  
AltaSea at the Port of Los Angeles

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# ABOUT US

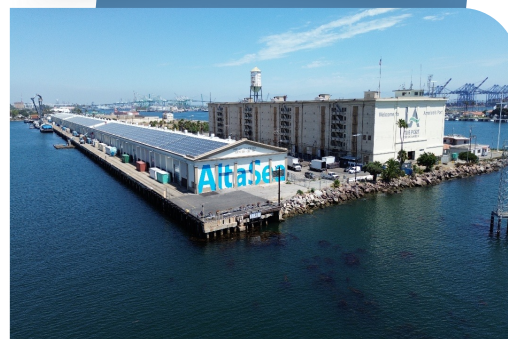
Founded in 2014, AltaSea is a non-profit ocean-focused science, business, and education center. Located at the Port of Los Angeles— AltaSea is uniquely positioned to place Southern California at the global center of the Blue Economy.

## OUR MISSION

AltaSea at the Port of Los Angeles is dedicated to accelerating scientific collaboration, advancing an emerging blue economy through business innovation and job creation, and inspiring the next generation, all for a more sustainable, just, and equitable world.

## OUR VISION

We will turn to the ocean to develop and scale up rapid solutions for some of the planet's most pressing challenges, such as climate change, energy supply, and global food security—and prepare today's generation of students for future careers in science, technology, engineering, business and ocean-related industry professions.

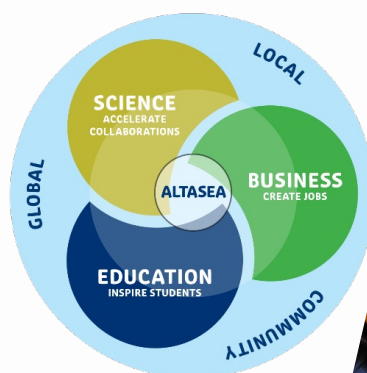


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# WHAT WE DO

ALTASEA IS A UNIQUE MODEL FOR OCEAN-RELATED SOLUTIONS

Through a bold plan conceived in concert with the community, AltaSea is making a lasting mark on the future of Los Angeles and the planet. The emphasis on creating public-private collaborations sets the organization apart. It is from these intersections that innovation is born, and from innovation comes groundbreaking impact.



### Science

AltaSea convenes and supports the world's finest marine scientists as they conduct breakthrough research and discover solutions addressing energy supply, climate change and global food security.

### Business

AltaSea nurtures new and existing businesses that commercialize scientific breakthroughs and emerging technologies to create ocean-related products, services and jobs.

### Education

AltaSea ignites passion and learning with pioneering programs that teach children and adults the critical role that the ocean has for our planet.



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# FOCUS CLUSTERS

AltaSea will create focal points of collaboration by initially focusing on the oceanic fields of Regenerative Aquaculture, Renewable Energy, and Blue Technology & Underwater Robotics. This approach allows a cluster of business, science and education to be formed at AltaSea around each category.

## REGENERATIVE AQUACULTURE



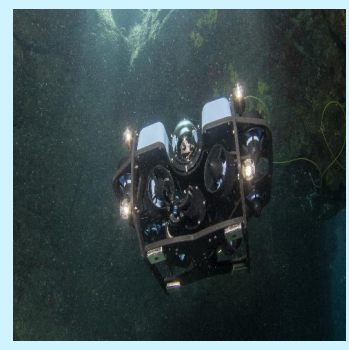
- On-land Aquaculture
- Open Ocean Aquaculture
- Food Production
- Kelp Extraction Products

## RENEWABLE ENERGY



- Carbon Capture
- Energy Storage
- Hydrogen Energy
- Wave, Tidal, and Wind Energy

## BLUE TECH & UNDERWATER ROBOTICS



- Data Acquisition
- Deep-water Monitoring
- Maritime Security
- Robotic Innovation

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# OCEAN STEM

## INSPIRING THE NEXT GENERATION

AltaSea's K-12 programs educate students about the Blue Economy, an initiative to protect the ecosystem of the ocean and turn to it as a resource for solving challenges such as climate change, energy supply, and food security.

### Student & Educator Engagement

- AltaSea on-site Field Trips
- Multi-week school based and virtual Ocean Exploration, Aquaculture and Marine Energy courses
- High School Ocean Ambassadors Program
- Blue Economy career workshops for High Schoolers
- Ocean STEM Professional Development workshops for Educators
- Ocean STEM Educator training workshops
- Learning Portal with open-source Ocean Stem resources and sample curriculum for Ocean exploration, Aquaculture and Marine Energy
- Blue Economy summer speaker series for Teens

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# WORKFORCE DEVELOPMENT

## The Workforce Development Program Goals are to

- 1) Create equitable and accessible pathways to blue economy careers, starting with early learning that continues into high school and college internship and training opportunities
- 2) Provide paid ocean STEM / blue economy internships for LA area students, expanding the number of students placed in internships by at least 50% each year
- 3) Partner with organizations to place (and track) trained workers

## Post-Secondary Student & Adult Career Engagement

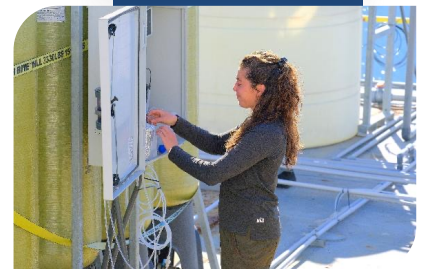
- Internships
- Apprenticeships

## Flexible Blue Economy Research Space

The 'Flex Labs' program is being developed to support post-secondary student researchers and other collegiate research teams seeking temporary facilities for ocean-related research and development

## Certificate / Training Programs, Collegiate Engagement, and Professional Development

- Blue Economy and Climate Action Pathways (BECAP)
- Aquaculture Certificate and Associate in Science Degree – SMC and virtual
- Hydrogen Energy Certificate – LA Harbor College & Commercial Partners



# DEEP BLUE DECADE INITIATIVE

## AltaSea's Deep Blue Decade

After the success of our first decade, we now seek to find climate solutions globally and improve the quality of life worldwide. We must radically increase support for blue economy technologies, rapidly scale their impact, and build the workforce necessary to meet the climate challenges.

### DBDI Ocean Community Partners

- ★ Indonesia
- ★ Jordan
- ★ Tanzania
- ★ Tonga

### Advisory Partners

- ★ Malaga
- ★ Monaco

### Education Partners

- ★ UK
- ★ South Korea
- ★ New Jersey

### Future Ocean Community Partners

- ★ Caribbean
- ★ Panama
- ★ Brazil
- ★ India
- ★ Saudi Arabia



**BE PART OF THE DEEP BLUE DECADE!**

## AltaSea's Accomplishments

225,000	Square Feet in Operation
18,419	Students Served
102	Interns & Mentors Completed Programs
31,477	AltaSea Visitors
3,000	Linear Feet Wharf Operations
4	Active BlueTech Test Beds

# Q&A

Please complete our  
brief workshop survey:  
[Surveymonkey.com/r/5RQT7QF](https://www.surveymonkey.com/r/5RQT7QF)

Join ECA (free) be notified of future events, etc.  
[EarthquakeCountry.org/join](https://EarthquakeCountry.org/join)

Questions?  
[info@earthquakecountry.org](mailto:info@earthquakecountry.org)



## Los Angeles Harbor Department Natural Disasters Preparation

December 10, 2025

Presented By  
Lynette Ursery  
Emergency Management Coordinator I

## Data Collection



COLLECT INFORMATION REGARDING THE INCIDENT AND SHARE IT INTERNALLY WITH OUR CITY TEAM (EMD), PORT PARTNERS, TENANTS, AND STAKEHOLDERS.



ASSESSMENT AND INFORMATION GATHERING WILL BE CONDUCTED WITH INPUT FROM PORT OPERATIONS, POLICE, FIRE, UNITED STATES COAST GUARD, OR OTHER FIRST RESPONDERS AT THE DISASTER SCENE(S).

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## Information Sharing



- We depend on our partners at Los Angeles City Emergency Management to inform the public about significant events that may impact the Wilmington/San Pedro area.
- Residents can RYLAN information at <https://ready.lacity.gov/>

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# Preparedness



- Monthly Bulletins
- Tsunami Awareness Week Campaign
- World Tsunami Day
- Great ShakeOut

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# Initial Notification



- Everbridge Notification System

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## Local Source Tsunami



- No “Official Tsunami Warning”
- Earthquake is your warning
- Strong or long shaking
- Go to high ground or inland
- Tsunami may arrive within minutes
- Signs, education and training important
- Know Your Zone [www.TsunamiZone.org](http://www.TsunamiZone.org)

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## Department Operations Center

- Activated by POLA Emergency Management or Port Police
- Disseminate external and internal information

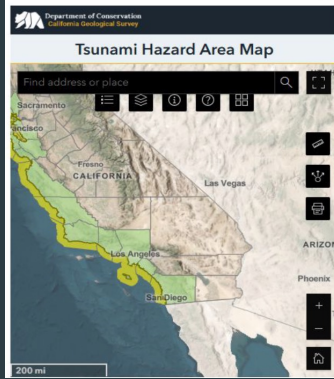
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## Los Angeles County Tsunami Hazard Areas

Explore your area of interest in the map below. You may also [OPEN THE MAP IN A NEW WINDOW](#)



### What to do Before, During, and After a Tsunami in Los Angeles County

- [Los Angeles County Emergency Response web page](#)
- [Los Angeles County Office of Emergency Management](#)
- [Ready.gov: Tsunami](#) summarizes how to Prepare NOW, Survive DURING, and Be Safe AFTER.
- [TsunamiZone.org](#) offers suggestions and resources for your family or organization to "know your zone" and to learn how to be safe.
- [The Earthquake Country Alliance](#) develops resources and organizes activities to improve earthquake and tsunami preparedness, mitigation and resiliency. The ECA offers a host of free booklets and other materials in multiple languages.



► Are you in the Tsunami Zone?

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## Tsunami Hazard Signs



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## Get Involved, Become Aware, Prepare !

- ✓ Family Communication Plan
- ✓ Emergency Contacts - Written
- ✓ Emergency Supplies/Go Bag
- ✓ Prepare for Pets
- ✓ Know where to go
- ✓ Family Evacuation Plan



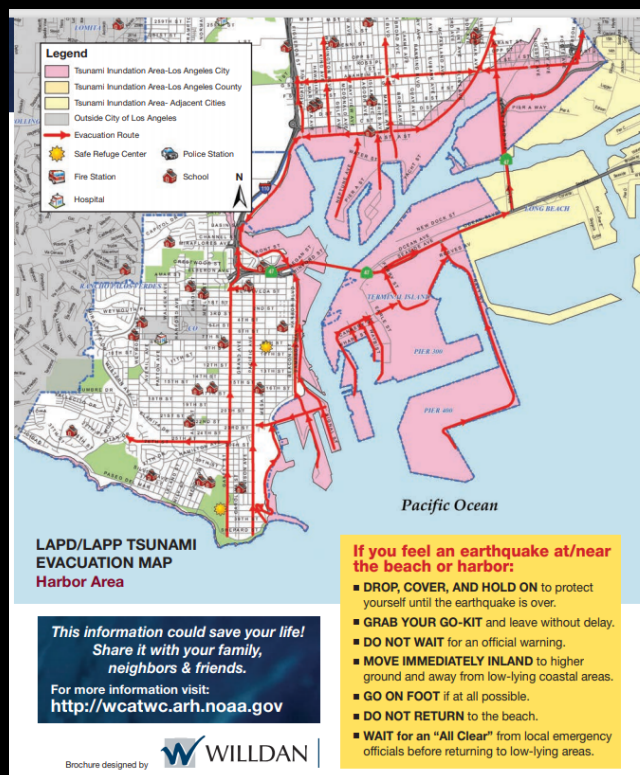
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## TSUNAMI INUNDATION MAPS

### HARBOR AREA

### CITY OF LOS ANGELES



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THANK YOU



PORT OF LOS ANGELES  
EMERGENCY MANAGEMENT DIVISION  
[WWW.PORTOFLOSANGELES.COM](http://WWW.PORTOFLOSANGELES.COM)

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# Q&A

Join ECA (free) be notified of future events, etc.  
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Questions?  
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# Recent SoCal Earthquakes

Margaret Vinci  
Manager, Office of Earthquake Programs  
Caltech/ShakeAlert

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## Quake Break – Southern California September – November 2025

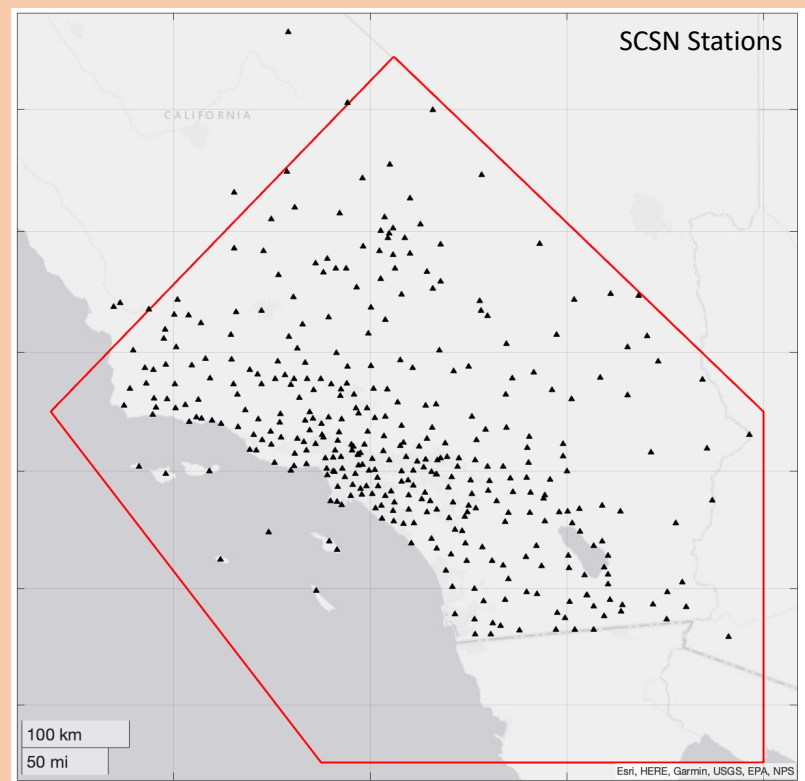
Margaret Vinci  
SCSN/Caltech



Caltech

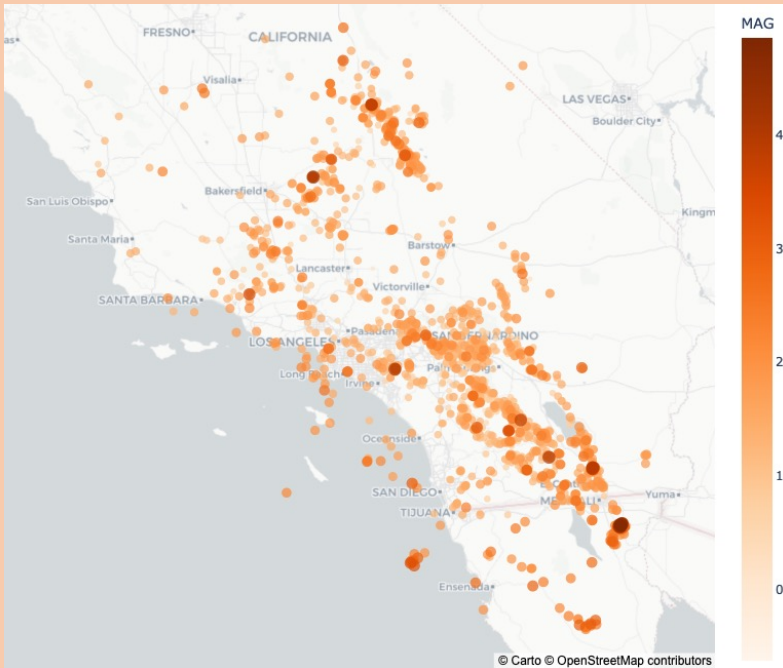


- \* Follow us on social media: @CaltechSeismo
- \* For earthquake notifications: @CaltechQuake (X/Twitter)



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## This quarter in Southern California there were:



3,715 earthquakes + 116 quarry blasts  
 M>2 – 267  
 M>3 – 29  
 M>4 – 0

9/6/25 M3.5 - LaVerne  
 9/10/25 M3.7 - Maricopa  
 9/13/25 M3.6 - Pine Valley  
 10/5/25 M3.5 - Big Bear City

Last 7 days 287 – average daily rate: 41  
 Event range: 0.44 – 3.20

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### Post-ShakeAlert® Message Summary

#### Earthquake:

Advanced National Seismic System (ANSS):  
 M 5.9 - 22.7 km (14.1 mi) E of Carson City  
 ANSS location: Not available at report time  
 ANSS depth: Not available at report time  
 ANSS origin (Local): Not available at report time  
 ANSS origin (UTC): Not available at report time  
 ShakeAlert first Message (UTC): 2025-12-04 16:07:09.10  
 ShakeAlert Event ID: ew1764864420

#### ShakeAlert Messages Issued (after origin time):

Initial: Not available  
 Peak: Not available  
 Final: Not available

#### ShakeAlert System Magnitude Estimates:

Initial: M 5.9  
 Peak: M 5.9  
 Final: M 5.9

#### ShakeAlert System Location Accuracy:

Initial: Not available at report time  
 Peak: Not available at report time  
 Final: Not available at report time

#### Wireless Emergency Alert:

This alert was distributed over the WEA system.  
 WEA alerts are distributed to the MMI+ area if ShakeAlert Peak M>=5.0

#### Number of Stations Reporting:

0 within 10 km of epicenter  
 0 within 100 km of epicenter  
 5 used in final ShakeAlert Message

#### Nearby Cities:

City	Distance km / (mi)	Time* sec	Shaking (MMI**)
Carson City	23 / (14)	~7	Moderate (5)
Reno	41 / (26)	~12	Light (4)
South Lake Tahoe	52 / (32)	~15	Light (4)
Sacramento	186 / (116)	--	Weak (3)

Radius shaken before message release: Not available

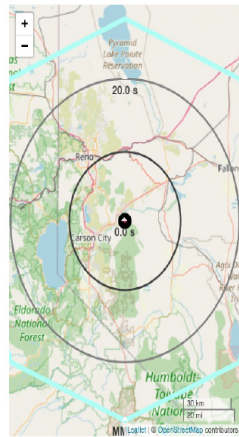
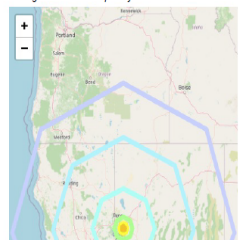


Figure 1. ShakeAlert initial earthquake location (black dot). ANSS earthquake epicenter not available. Polygon shows estimated MMI 4 shaking intensity area. If shown, red circle is front of peak shaking when the Message was released\*\*\*. Shaking takes 10 s to expand from circle to circle.



### 8/4/25 M5.9 Dayton, Nevada False Alert

The Shakealert EEW system released an incorrect alert triggering WEA, MyShake, Android and IOS cell phone alerts to estimated MMI 3 intensity areas across NoCal

- Event did not occur but ShakeAlert delivery system worked the way it was designed to work – just no event
- Cause: seismic sensors belonging to the Nevada network picked up strong noise signals and incorrectly misinterpreted as an earthquake and triggered an alert
- Fail safe technology is incorporated into the system to detect and cancel such events but did not do so in this event & will be improved to address such activity
- Issues are rare but events like this uncover bugs and the System is being continually being upgraded
- **NOTE: First false alert since the system went live in 2016 and these events are rare – EEW is complex!**

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## How can you sign up to get ShakeAlert EEW alerts?

**ShakeAlert-Powered Earthquake Early Warning on Your Cell Phone**  
Available in Washington, Oregon, and California

**Wireless Emergency Alerts**  
Sent by FEMA to all WEA-capable cell phones  
Minimum magnitude 5.0  
Light Shaking or Greater (MMI IV+)

**Android Alerts**  
Sent by Google to all Android phones  
Minimum magnitude 4.5  
Weak to Light Shaking (MMI III-IV): Be Aware  
Moderate Shaking or Greater (MMI V+): Take Action

**Cell Phone App**  
Sent by the MyShake App (requires download)  
Minimum magnitude 4.5  
Weak Shaking or Greater (MMI III+)

**ShakeAlert**  
05.2025



For iPhones, enable the "Local Awareness" feature

- Settings > Notifications
- Government alerts > emergency alerts
- Turn on Local Awareness
- Bi-Level alerts:
  - Awareness alert: alert to prepare to take action
  - Action Alert: labeled critical strong shaking immediate action

<https://support.apple.com/en-us/102516>

# Q&A

Join ECA (free) be notified of future events, etc.  
[EarthquakeCountry.org/join](https://EarthquakeCountry.org/join)

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[Surveymonkey.com/r/5RQT7QF](https://Surveymonkey.com/r/5RQT7QF)



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# Your Action Plan for the Seven Steps to Earthquake Safety



**[EarthquakeCountry.org/resources](https://EarthquakeCountry.org/resources)**

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## Share Feedback or Suggestions

Please complete our workshop survey:  
[Surveymonkey.com/r/5RQT7QF](https://Surveymonkey.com/r/5RQT7QF)

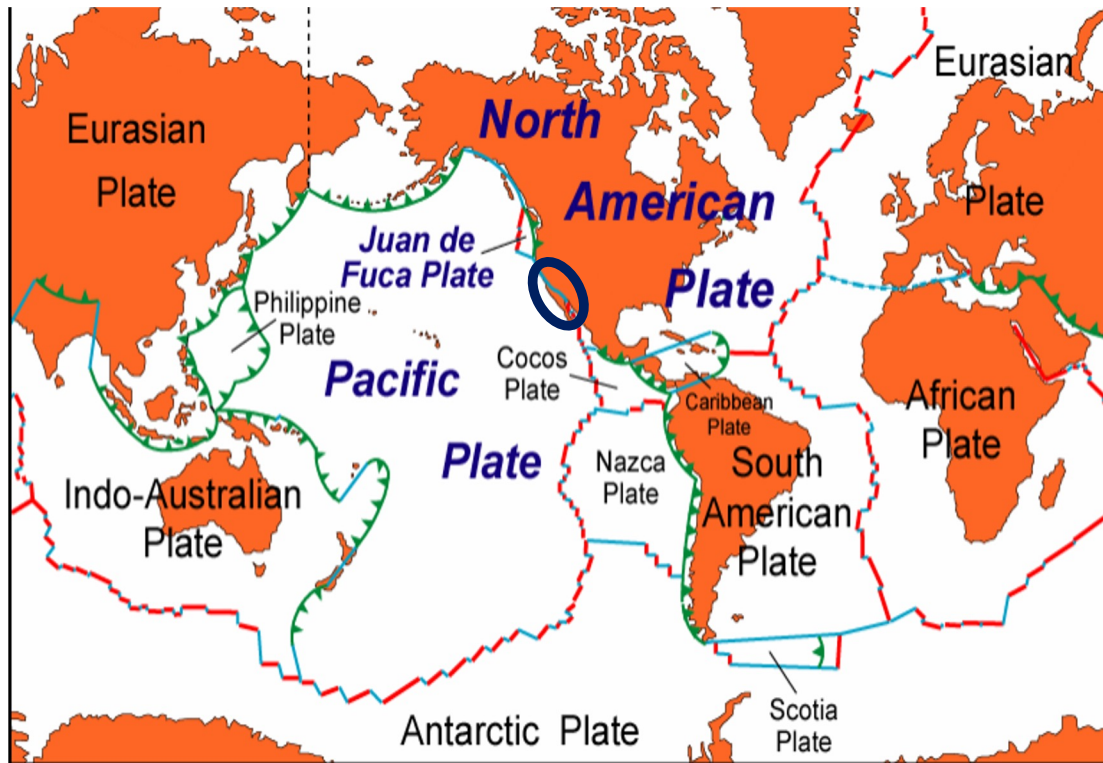


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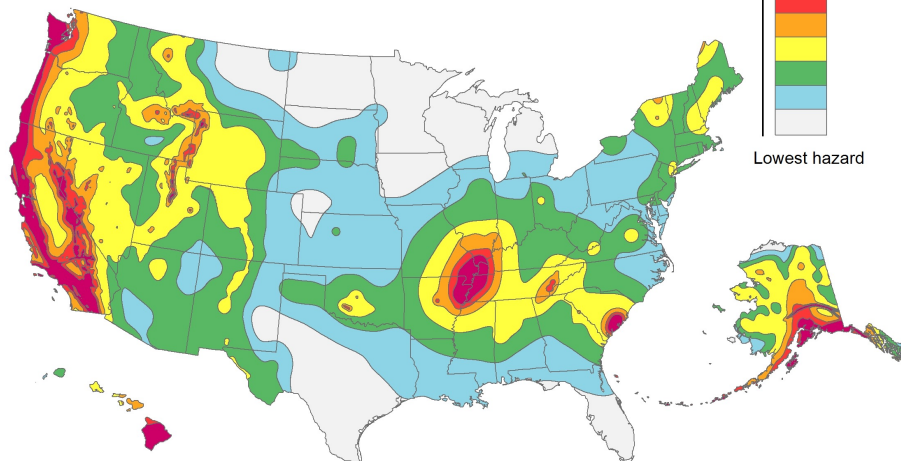
# We Live on the Edge...



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## National Seismic Hazard Maps

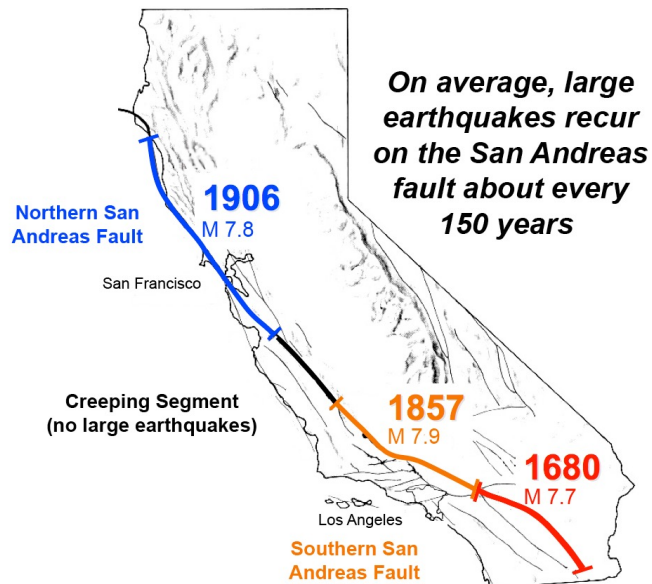


[usgs.gov/programs/earthquake-hazards/hazards](https://usgs.gov/programs/earthquake-hazards/hazards)

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# Why we must prepare now

- It has been almost 169 years since the last great San Andreas earthquake in Southern California (January 9, 1857 Magnitude 7.9 “Ft. Tejon Earthquake” (orange)
- It has been over 340 years since the last great earthquake on the southernmost section of the San Andreas fault. (red)
- In addition, there are hundreds of other faults (such as the Newport-Inglewood fault) that can also have damaging earthquakes.
- There will be major loss of life and property unless we each take action now, especially by securing our buildings and their contents.



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## Improved Understanding of Major Faults

**UCERF3: A New Earthquake Forecast for California's Complex Fault System**

[www.WGCEP.org/UCERF3](http://www.WGCEP.org/UCERF3)

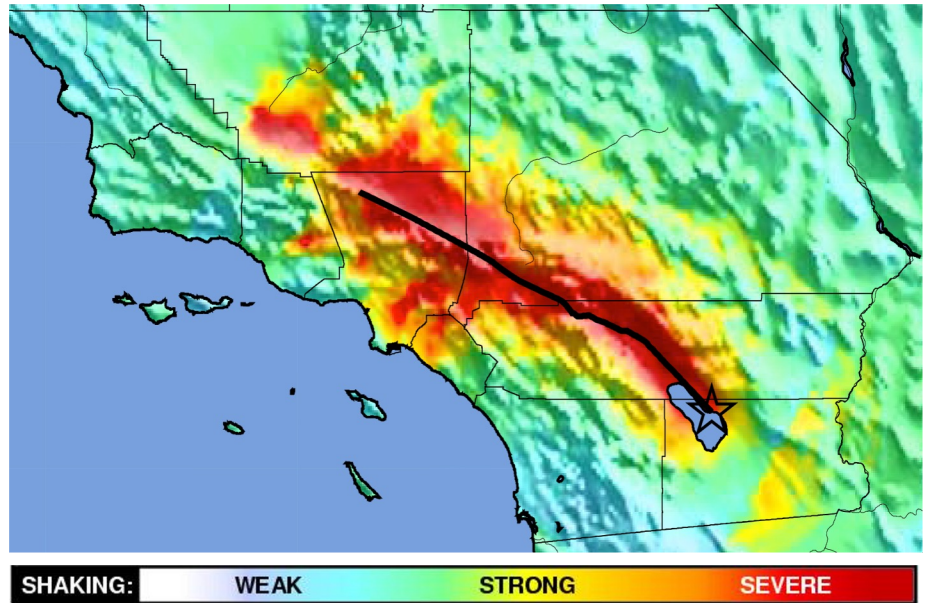
USGS SC/EC CALIFORNIA GEOLOGICAL SURVEY CEA

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# A Possible “Big One” (M7.8)

- Southernmost San Andreas
- 180 mile rupture
- Magnitude 7.8
- 100 seconds of fault rupture
- Shaking for over 2 minutes in many places
- Dr. Lucy Jones (USGS) led many scientists, engineers, and others to create a scenario of what will happen.



[ShakeOut.org/scenario](https://ShakeOut.org/scenario)

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## ShakeOut Scenario “Disaster Equation”

300,000 buildings significantly damaged

Widespread infrastructure damage

1,600 large fires

\$213+ billion damages

270,000 displaced persons

50,000 injuries

1,800 deaths

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# More than 300 Active Faults



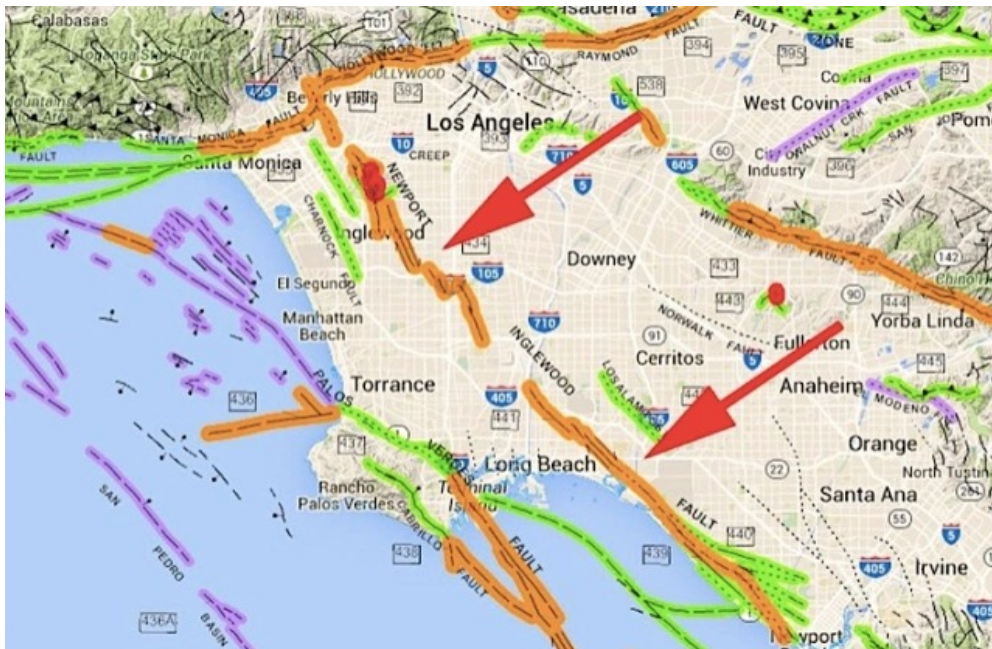
Each can have earthquakes larger than magnitude 6

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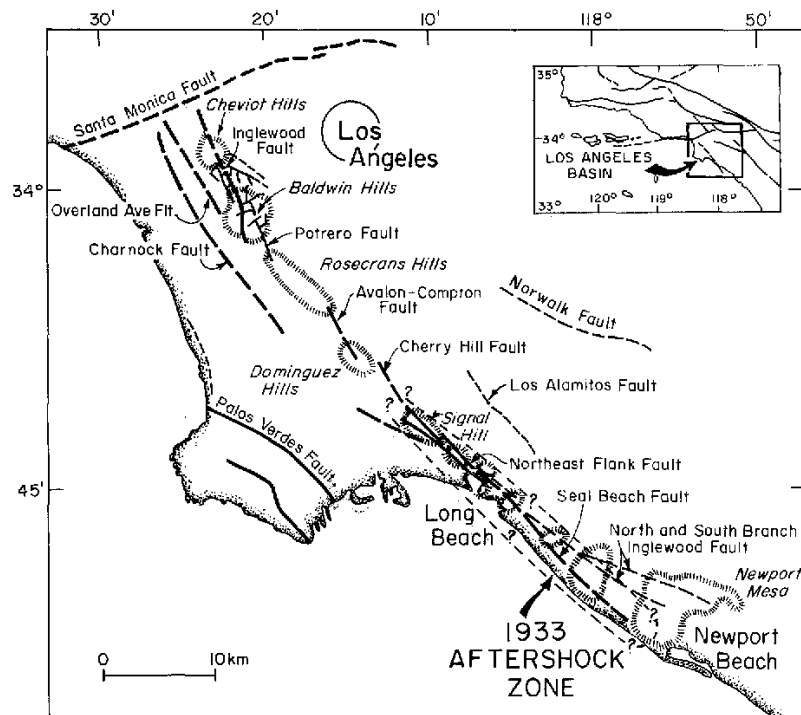
## Los Angeles Region Major Faults



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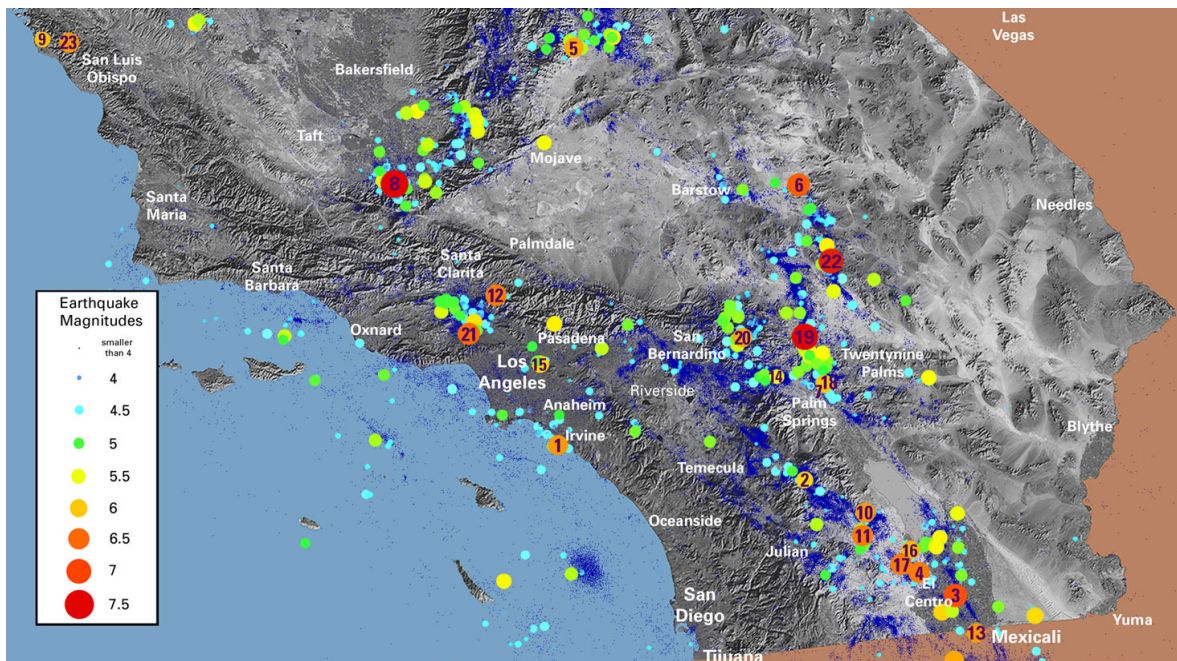
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# Newport-Inglewood Fault



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## 30 Earthquakes Every Day



Most are too small to be felt by people

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# More Can and Must Be Done...

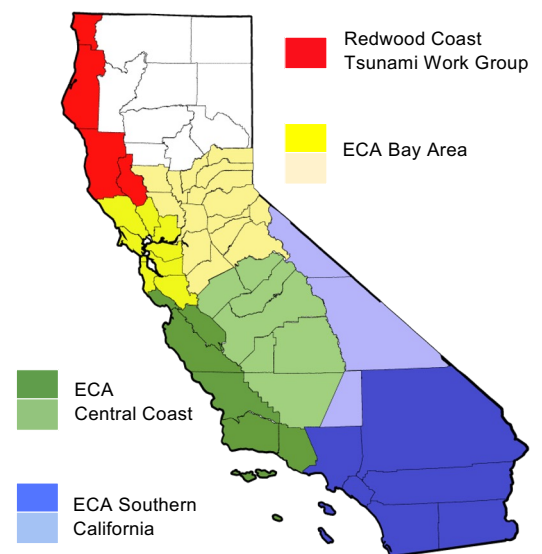
- ...at every level
- ...before, during, and after
- ...by each and all of us



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## Earthquake Country Alliance

- 4000+ *Public-Private-Grassroots* leaders
- Statewide *committees* develop resources and deliver programs
- *Regional Alliances* organize meetings and outreach activities
- California's Office of Emergency Services provides NEHRP funding for ECA earthquake mitigation activities
- USC's Statewide California Earthquake Center (SCEC.org) administers ECA



Join: [EarthquakeCountry.org/join](https://EarthquakeCountry.org/join)



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# ECA Statewide Activities

Develop Messaging and Resources:

[EarthquakeCountry.org](http://EarthquakeCountry.org)  
[EarthquakeCountry.org/resources](http://EarthquakeCountry.org/resources)  
[Terremotos.org](http://Terremotos.org)



Support Tsunami Preparedness Week:

[TsunamiZone.org/california](http://TsunamiZone.org/california)

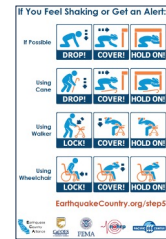


March  
21-29,  
2026

Created and Coordinate  
The Great California ShakeOut:

[ShakeOut.org/california](http://ShakeOut.org/california)

Shake  
Out



Oct. 15,  
2026

Webinars & other events

[EarthquakeCountry.org/calendar](http://EarthquakeCountry.org/calendar)

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## Seven Steps To Earthquake Safety

BEFORE

1. Secure  
Your Space



2. Plan  
To Be Safe



3. Organize  
Supplies



4. Minimize  
Financial Hardship



5. Drop, Cover,  
and Hold On



6. Improve  
Safety



AFTER

7. Reconnect  
and Restore



[EarthquakeCountry.org/sevensteps](http://EarthquakeCountry.org/sevensteps)

[Terremotos.org/sietepasos](http://Terremotos.org/sietepasos)

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# Step 1: Secure Your Space

BEFORE

- Identify hazards
- Secure moveable items
- Reduce Injuries and damage

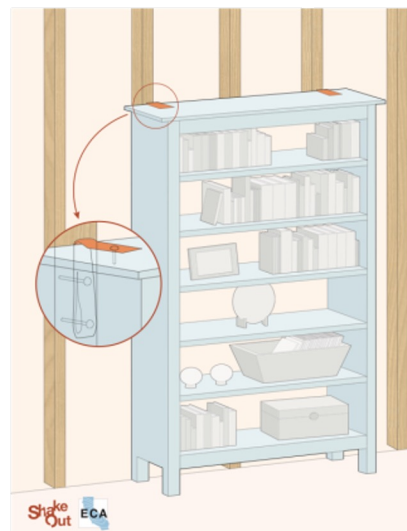
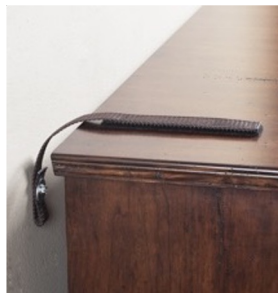


[EarthquakeCountry.org/step1](http://EarthquakeCountry.org/step1)

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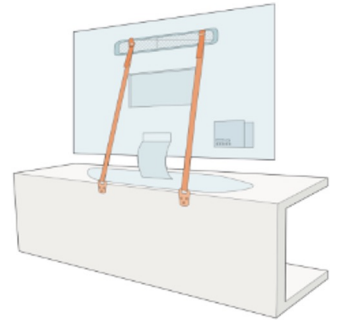
## Top-Heavy Furniture



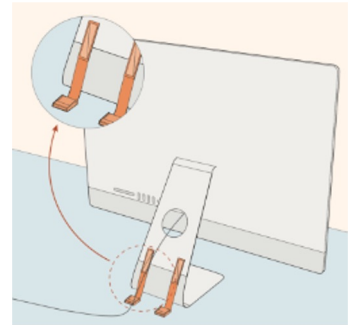
Use flexible nylon straps (buckles or velcro)

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# TVs and Electronics



Straps and buckles secured with adhesive and bolted to anchor points

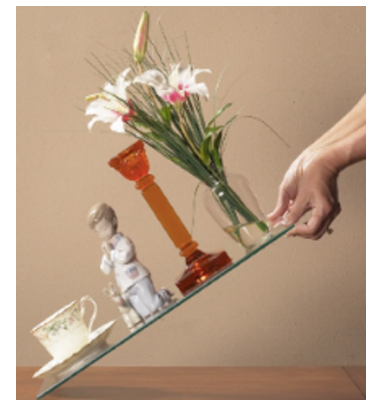
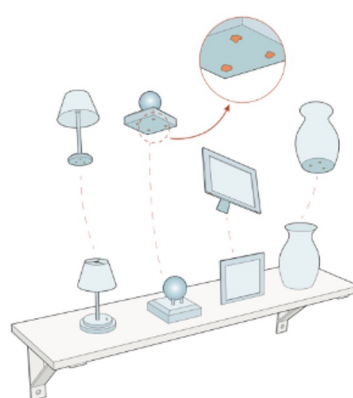
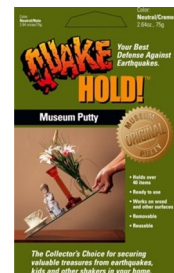


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# Smaller Items



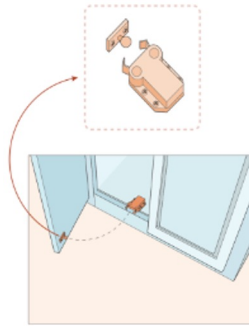
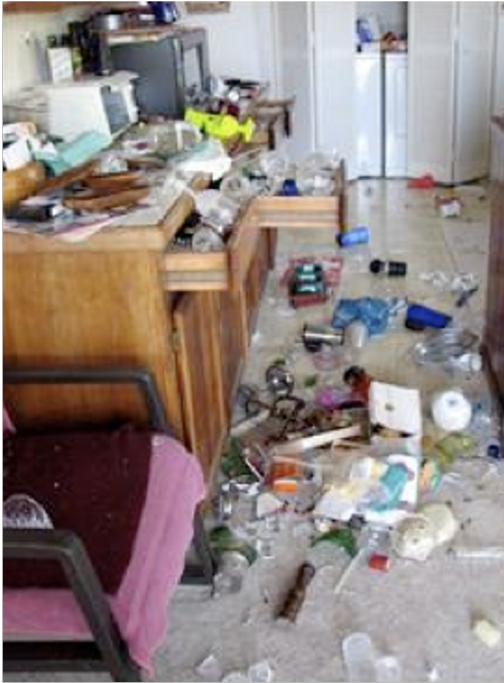
- Earthquake Putty
- Microcrystalline Museum Wax



54

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# Kitchen Cabinets



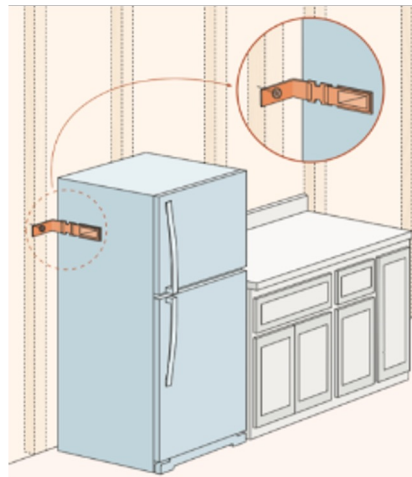
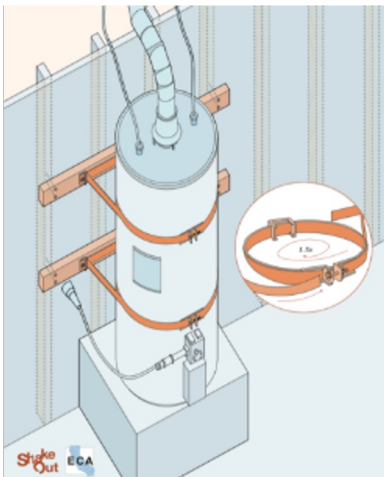
Many options are available at hardware stores and online

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55

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# Water Heaters and Large Appliances



- Use flexible stainless-steel gas connectors
- Secure large appliances to wall studs



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# Secure Your Space Guide & Worksheet

### Step 1: Secure Your Space

How to prevent items from falling during earthquakes

Imagine your entire home or workplace being picked up and shaken during an earthquake – even heavy objects can fall or be thrown around! This usually causes the most injuries during earthquakes, and replacing items or repairing damages can also be very costly.

These issues can be prevented through simple actions to secure furniture and other items in place. That's why "Secure Your Space" is Step 1 of the Seven Steps to Earthquake Safety!

Start now by moving tall furniture like bookcases away from beds, sofas, or other places where people spend a lot of time. Move heavy objects to lower locations.

Then continue by securing things such as televisions, dressers, water heaters, cabinet doors, hanging objects, and small objects, following the instructions within this document. Try securing at least one item every weekend until you get everything done. You may need to ask others for help or to borrow tools. Perhaps you might help them too. We're all in this together!

Learn more at [EarthquakeCountry.org/Step1](https://EarthquakeCountry.org/Step1)

© 2022 Earthquake Country Alliance





## How to Secure:

- Tall Furniture
- Televisions/Monitors
- Hanging Objects
- Small Objects
- Refrigerators
- Cabinet Doors
- Storage Racks
- Water Heater

[EarthquakeCountry.org/step1](https://EarthquakeCountry.org/step1)

## Begin to Secure Your Space

**TODAY:**

*Move a heavy object to a lower location*

- Review [EarthquakeCountry.org/step1](https://EarthquakeCountry.org/step1)
- List potential hazards to be secured
- Secure everything in a weekend, or over time
- Show your friends, family, neighbors, etc. to encourage them to *Secure Their Space* (even better... help each other!)

Your Step 1 Action Plan	
What will you secure, and when?	
Item and Location:	When:

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# Step 2: Plan to Be Safe

BEFORE

- Create a disaster plan
- Decide how to communicate in an emergency



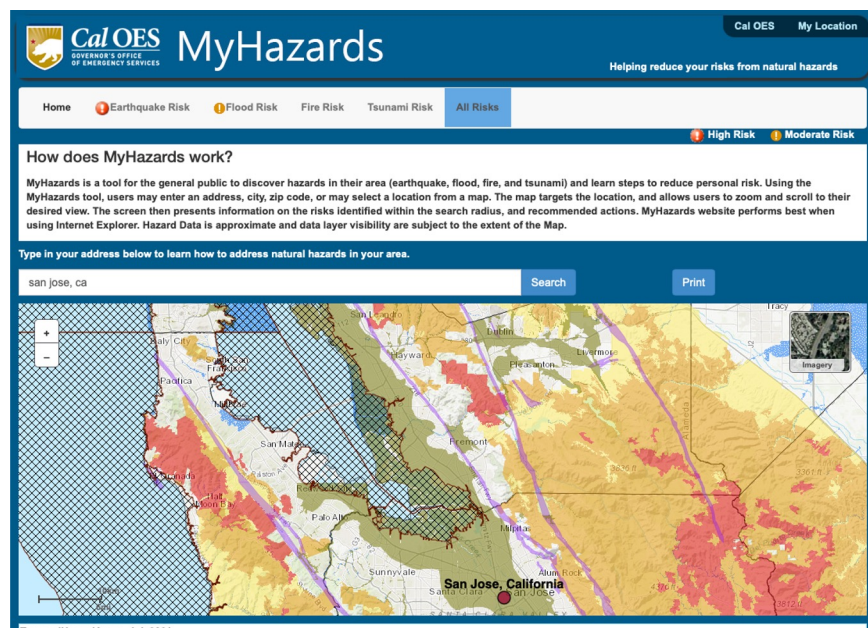
[EarthquakeCountry.org/step2](http://EarthquakeCountry.org/step2)

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## Know Your Hazards



[MyHazards.CalOES.ca.gov](http://MyHazards.CalOES.ca.gov)

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## Why Prepare??

- Disasters can occur anytime, anywhere
- First Responders will not be immediately available
- Preparing is key to maintaining independence



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## Why Prepare?



Utilities may not work

---

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## Why Prepare?



Roads may be  
impassible



Transportation  
may be  
unavailable

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53

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## Why Prepare?



Grocery stores, pharmacies,  
banks, etc. may be closed



Getting accurate information  
will be difficult

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# Planning Is Personal

- Make a plan where you spend time
  - Work, school, family or friend's homes
- Assess YOUR situation
- Plan, prepare, practice
  - worst case scenario
- Address YOUR needs & concerns



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55

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## Plan How You Will Extinguish Small Fires

- Get at least one fire extinguisher for your home.
- Your local fire department can train you and your family to use it properly, or you can watch videos online.



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# Plan How You Will Turn Off Utilities (if needed)

- Know the location of utility shutoffs (gas, water, and electricity)
- Keep needed tools nearby
- Know how to shut them off
- Gas:
  - Only turn off the gas if you smell, hear, or see leaking gas
  - Use wrench and turn ¼ way
  - Or have automatic gas shutoff valve installed



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## Take Training/Networking Programs

- Learn about local programs, such as:
  - CERT
  - Map Your Neighborhood
  - Neighborfest
  - Red Cross trainings



# Plan How To Communicate and Connect

- Choose a meeting place where everyone will go if your home is not accessible.
- Share a list of key contacts (include someone in another area to text or call)
- If you are a person with a disability, identify and include your support network
- Sign up for local emergency text alerts or download alert phone apps.
- Get a NOAA Weather Radio for weather updates or any portable radio for news
- Know your neighborhood Amateur Radio operator – or become one!

## Your Step 2 Action Plan

Start with the following:

### Out-of-Area Contact:

Name: \_\_\_\_\_ Phone: \_\_\_\_\_

### Other Key Contacts:

Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Meeting Place: \_\_\_\_\_

### Other Planning Actions?

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## Step 3: Organize Disaster Supplies

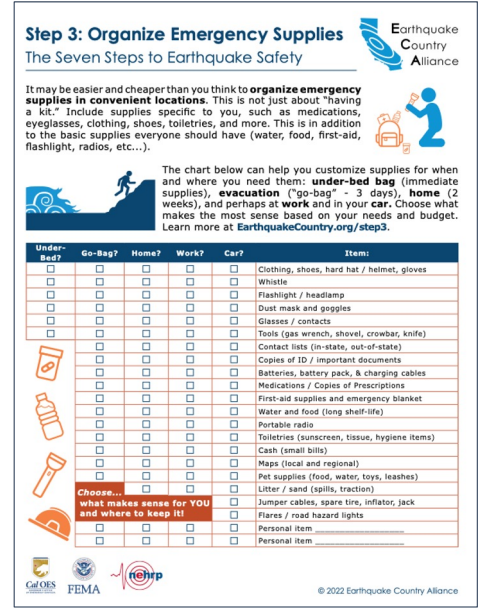
### BEFORE

- At home, work, and in your car
- Copies of prescriptions, extra glasses, etc.
- Essentials for 3 days, ideally 2 weeks



# Disaster Supplies Checklist

- Choose where you want to store your supplies:
  - Under-Bed bag?
  - Go-Bag?
  - Home?
  - Work?
  - Car?
- What personal items do you need?



**EarthquakeCountry.org/step3**

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## Under-Bed Bags

- Keep **shoes**, socks, and a **flashlight** in a **closed** bag attached to each bed.
- You can also include other items as in this picture.

## Prevents...

- Stepping on broken glass, or glass in shoes
- Tripping over objects

## Allows you to...

- Exit bedroom safely
- Help injured



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# Go Bags / Car Kits

- Prescription & critical medications
- Non-perishable food & manual can opener
- As much water as can carry
- Flashlights & batteries or other power
- First aid kit
- Personal health and hygiene needs
- Pet supplies (water, food, leash, carrier)



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# Home Supplies / Stay Kits

- Up to 2 weeks of water, food, and other supplies

1 gallon of water per person or pet, per day, for up to 2 weeks

3 people +1 dog = 4 gallons/day

4 gallons x 14 days= 54 gallons

Under-Bed?	Go-Bag?	Home?	Work?	Car?	Item:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Clothing, shoes, hard hat / helmet, gloves
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Whistle
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Flashlight / headlamp
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Dust mask and goggles
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Glasses / contacts
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Tools (gas wrench, shovel, crowbar, knife)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Contact lists (in-state, out-of-state)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Copies of ID / important documents
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Batteries, battery pack, & charging cables
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Medications / Copies of Prescriptions
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	First-aid supplies and emergency blanket
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Water and food (long shelf-life)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Portable radio
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Toiletries (sunscreen, tissue, hygiene items)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Cash (small bills)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Maps (local and regional)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pet supplies (food, water, toys, leashes)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Litter / sand (spills, traction)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Jumper cables, spare tire, inflator, jack
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Flares / road hazard lights
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Personal item _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Personal item _____



- Keep items in containers, backpacks, etc. – you may need to take with you

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# Personalize Disaster Supplies

- Account for dietary needs
- Medical Information list
- Stockpile medications & supplies
- Plan for refrigerated medication
- Label adaptive equipment with your contact information
- Key people know location



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## What is missing (or needs to be checked?)

### Your Step 3 Action Plan

*What will you keep in each location?*

**Under-Bed Bags:** \_\_\_\_\_

\_\_\_\_\_

**Go-Bags:** \_\_\_\_\_

\_\_\_\_\_

**Home or Work Supplies:** \_\_\_\_\_

\_\_\_\_\_

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# Step 4: Minimize Financial Hardship

BEFORE

- Organize important documents
- Strengthen your property
- Plan for emergency expenses



[EarthquakeCountry.org/step4](https://EarthquakeCountry.org/step4)

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## Organize Important Documents

(keep copies in your go-bag or in a secure place online)

### IDENTIFICATION

- ☐ Birth, marriage, adoption, and other certificates
- ☐ Driver's License, Social Security, Passport, Green Card, Military I.D.
- ☐ Pet identification (licenses/tags, photos) and vaccination records

### FINANCIAL

- ☐ Checking, savings, retirement, and investment account info
- ☐ Lease or rental agreement, deed/title, mortgage info
- ☐ Vehicle payment info, registration, title
- ☐ Utility bills, credit cards, student loans, etc.
- ☐ Homeowners/renters, auto, life, earthquake, flood Insurance
- ☐ Photos and lists of belongings (for insurance claims)

### MEDICAL

- ☐ Health/dental insurance, Medicare, Medicaid, VA health benefits
- ☐ Lists of medications, immunizations, allergies, prescriptions, etc.
- ☐ Living will, medical power of attorney

### CONTACT INFO

- ☐ Family, neighbors, friends (including an "out of area" contact)
- ☐ Employers, supervisors, employees, colleagues
- ☐ Schools, childcare, elder care
- ☐ Doctors, dentists, veterinarians, social service providers

[EarthquakeCountry.org/step4](https://EarthquakeCountry.org/step4)

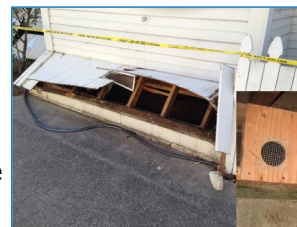
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# Strengthen Your Property

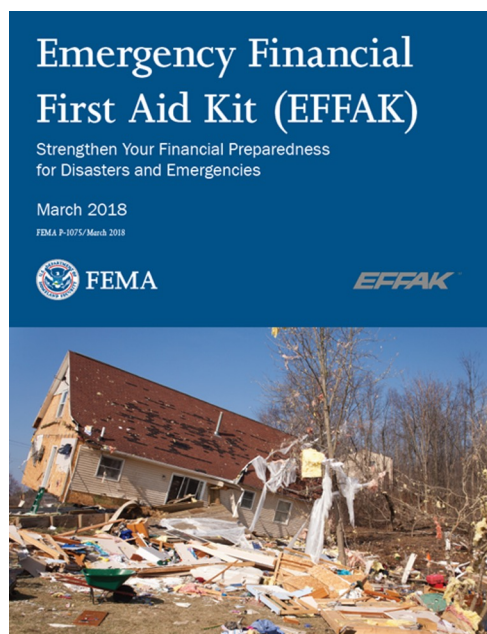
- Home retrofit guidance is available for several vulnerable home types at: [StrengthenYourHouse.com](https://www.strengthenyourhouse.com)
  - Wood-framed, pre-1980 homes with raised foundations and crawl spaces
    - Wall framing is bolted to the home's foundation and vertical walls in the crawl space are braced with plywood
    - Visit [EarthquakeBraceBolt.com](https://www.earthquakebracebolt.com) to learn about grants up to \$3000
  - Pre-2000 homes with a living space above the garage
    - Typically, a new steel beam, or a pre-manufactured shear wall system will be installed to reinforce the front of the garage
    - Visit [EarthquakeSoftStory.com](https://www.earthquakesoftstory.com) to learn about possible grant programs
  - Hillside Homes
  - Mobilehomes and Manufactured Homes
  - Chimneys and Fireplaces
- Many cities are requiring retrofit of other vulnerable buildings, including some types of apartment buildings and commercial buildings.



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## Plan for Emergency Expenses

- Keep a small amount of cash at home in a safe place
- Have an emergency savings account
- Consider earthquake insurance (homeowners, renters, commercial)
- Download FEMA's *Emergency Financial First Aid Kit (EFFAK)*  
[ready.gov/financial-preparedness](https://www.ready.gov/financial-preparedness)



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## What Will You Do Now to Minimize Financial Hardship later?

### Your Step 4 Action Plan

*What will you do next?*

**Organize Documents:** \_\_\_\_\_

\_\_\_\_\_

**Strengthen Property:** \_\_\_\_\_

\_\_\_\_\_

**Emergency Expenses:** \_\_\_\_\_

\_\_\_\_\_

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## Step 5: Drop (Lock), Cover and Hold On

**DURING**

- When the earth shakes, act immediately
- Protect yourself from falling to the ground, or from falling objects



**[EarthquakeCountry.org/step5](https://EarthquakeCountry.org/step5)**

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# Why Drop, Cover, and Hold On?

- Strong consensus for many years, based on data for how people are injured, and experience of Urban Search and Rescue firefighters
- Prevents being thrown to the ground
- Reduces injury from falling or flying items... including structural elements and exterior façades (brick, glass, etc.)
- Increases chance of surviving collapse



Classroom in Calexico, CA  
April 2010 M7.2



[EarthquakeCountry.org/step5](http://EarthquakeCountry.org/step5)

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## Adapt to Your Situation

- If you can't get back up, don't get down
  - Bend over and cover your head and neck with your arms/hands
- Instruct others how to assist you
- Practice often
- [EarthquakeCountry.org/step5](http://EarthquakeCountry.org/step5)

If You Feel Shaking or Get an Alert:



[EarthquakeCountry.org/step5](http://EarthquakeCountry.org/step5)



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# Know How to Protect Yourself

In *most* situations and building types:



**Drop** on to your hands and knees, where you are



See [EarthquakeCountry.org/step5](http://EarthquakeCountry.org/step5) for advice for a variety of settings

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# Know How to Protect Yourself

In *most* situations and building types:



**Cover** your head and neck with one arm and hand

- If a sturdy table or desk is nearby, crawl underneath it for shelter
- If no table/desk, crawl against a wall or next to low furniture for sideways protection



See [EarthquakeCountry.org/step5](http://EarthquakeCountry.org/step5) for advice for a variety of settings

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# Know How to Protect Yourself

In *most* situations and building types:



**Hold On** to your shelter until shaking stops

- Be ready to move with your shelter
- *If not under a shelter*, hold on to your head/neck with both arms and hands



See [EarthquakeCountry.org/step5](http://EarthquakeCountry.org/step5) for advice for a variety of settings

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## Earthquake Safety Video Series

**Shake Out**  
IF NEAR A STURDY  
DESK OR TABLE

**Shake Out**  
IF THERE'S NO STURDY  
DESK OR TABLE

- Separate short (1-8 min) videos:
  - indoors, nearby table/desk
  - indoors, no table/desk
  - theater/stadium
  - near the shore
  - in a car
  - in bed
  - for users of mobility devices/aids
- View full videos at [Youtube.com/greatshakeout](https://www.youtube.com/greatshakeout)
- Download full videos at [ShakeOut.org/messaging](http://ShakeOut.org/messaging)

**Shake  
Out™**

**IF USING A CANE**

**Shake  
Out™**

**IF USING A WHEELCHAIR**



**Shake  
Out™**

**IF USING A WALKER**

**Shake  
Out™**

**IF YOU'RE IN BED**

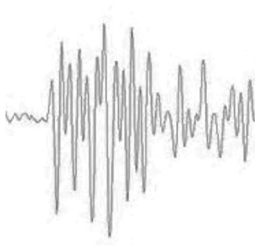
# When Should You Protect Yourself?



When You  
Get an  
Earthquake  
Early Warning



When You  
Feel  
Earthquake  
Shaking



When You  
Do an  
Earthquake  
Drill

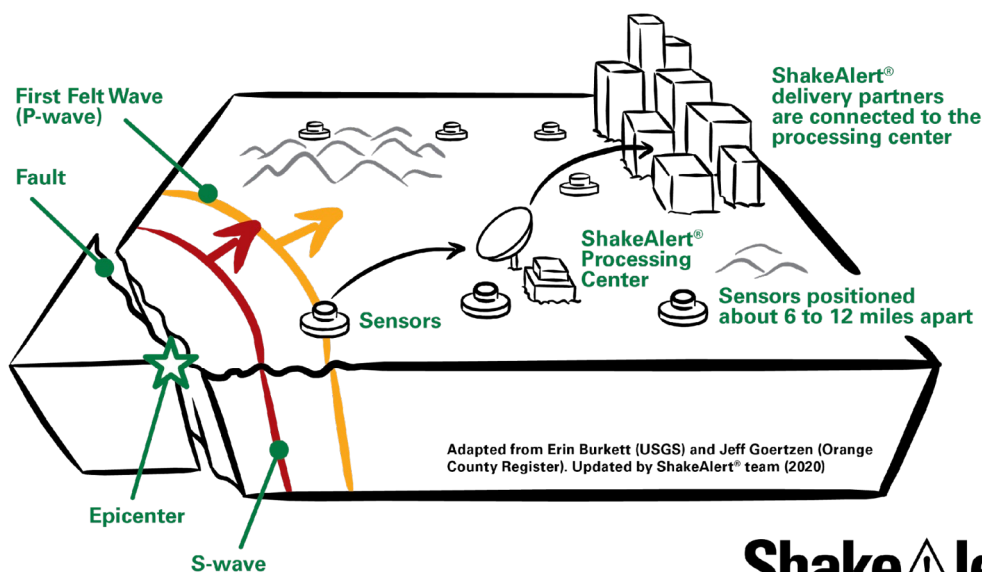


**ShakeOut.org**  
2026: October 15

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## Earthquake Early Warning

- Detects an earthquake as it begins
- Rapidly estimates ground-motion patterns
- Issues alerts to locations expected to experience significant shaking



**Shake!lert™**

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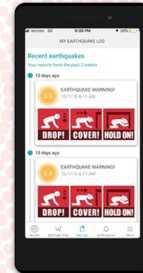
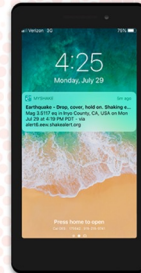
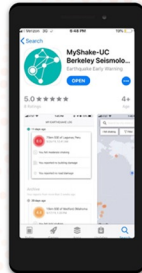
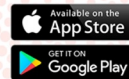
# Earthquake Warning California

Earthquake Early Warnings  
Now Available through Wireless  
Emergency Alerts (WEA)

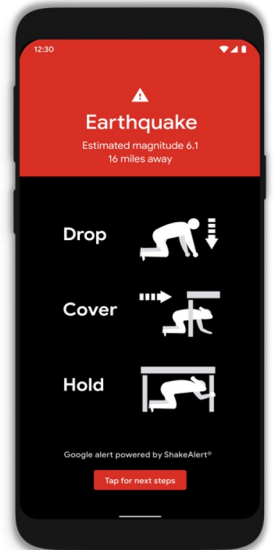


Magnitude = **5 or greater**  
and  
Intensity at your location =  
**greater than IV**

Download the  **MyShake™**  
Earthquake Early Warning App.



Magnitude = **4.5 or greater**  
and  
Intensity at your location =  
**greater than III**



Magnitude = **4.5 or greater**  
and  
Intensity at your location =  
**greater than III**

**earthquake.ca.gov**

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## Great ShakeOut Earthquake Drills

- Annual opportunity for schools, organizations, and families to practice earthquake safety and other aspects of their emergency plans
- 2026 International ShakeOut Day:  
**October 15**
- Learn more and register: [ShakeOut.org](https://ShakeOut.org)
- **10.5 million** registered in 2025
- How to participate, guides, etc.:  
[ShakeOut.org/howtoparticipate](https://ShakeOut.org/howtoparticipate)

**Shake  
Out**  
TM



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# Everyone Can ShakeOut



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## Example ShakeOut Resources

Official Participant

### Join Us in the World's Largest Earthquake Drill.

**DROPI! COVER! HOLD ON!**

October 16, 2025 **ShakeOut**

Register at [ShakeOut.org](https://ShakeOut.org)

### Protect Yourself!

If you feel shaking or get an alert.

**DROPI! COVER! HOLD ON!**

Learn more at [ShakeOut.org](https://ShakeOut.org)

### Great ShakeOut Earthquake Drills

**K-12 Schools: Get Ready to #ShakeOut!**

Join millions of people worldwide each year in practicing a "Drop, Cover, and Hold On" drill and other earthquake safety actions. That people participate on International ShakeOut Day (the third Thursday of October), but you can hold your drill on any day of the year!

**How to Participate**

- Register at [ShakeOut.org](https://ShakeOut.org) to be counted and get updates.
- Learn earthquake safety at [ShakeOut.org/Implementations](https://ShakeOut.org/Implementations).
- Learn about the science of earthquakes at [ShakeOut.org/Science](https://ShakeOut.org/Science).
- Include other aspects of your emergency plans, such as evacuation procedures.
- Hold your earthquake drill on any day that works for you.

**Get Prepared for Earthquakes:**

- Review preparedness materials from [ShakeOut.org/Implementations](https://ShakeOut.org/Implementations).
- Secure items that might fall in the event of strong shaking.
- Check in with your family member.
- Practice "Drop, Cover, and Hold On" with your students.
- Encourage staff and students to practice at home.
- Visit [ShakeOut.org](https://ShakeOut.org) for more information.
- Visit [ShakeOut.org/Implementations](https://ShakeOut.org/Implementations) to learn about participating.

**Share the ShakeOut!**

- Encourage students and staff to register home.
- Use hashtags on social media.
- Posters and videos are available at [ShakeOut.org](https://ShakeOut.org).
- Share photos and videos of your drill using #ShakeOut.

### Great ShakeOut Earthquake Drills

**Business: Get Ready to #ShakeOut!**

Join millions of people worldwide each year in practicing a "Drop, Cover, and Hold On" drill and other earthquake safety actions. That people participate on International ShakeOut Day (the third Thursday of October), but you can hold your drill on any day of the year!

**How to Participate**

- Register at [ShakeOut.org](https://ShakeOut.org) to be counted and get updates.
- Learn earthquake safety at [ShakeOut.org/Implementations](https://ShakeOut.org/Implementations).
- Learn about the science of earthquakes at [ShakeOut.org/Science](https://ShakeOut.org/Science).
- Include other aspects of your emergency plans, such as evacuation procedures.
- Hold your earthquake drill on any day that works for you.

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- Secure items that might fall in the event of strong shaking.
- Check in with your family member.
- Practice "Drop, Cover, and Hold On" with your employees.
- Encourage staff and employees to practice at home.
- Visit [ShakeOut.org](https://ShakeOut.org) for more information.
- Visit [ShakeOut.org/Implementations](https://ShakeOut.org/Implementations) to learn about participating.

**Share the ShakeOut!**

- Encourage employees to register and conduct home drills.
- Use hashtags in your organization's posts.
- Posters and videos are available at [ShakeOut.org](https://ShakeOut.org).
- Share photos and videos of your drill using #ShakeOut.

### Great ShakeOut Earthquake Drills

Drill Guidance for Organizations (Remote Work, In-Person or Both)

**ShakeOut Great ShakeOut Earthquake Drills**

Drill Guidance for Grades K-4 (Distance Learning or In-Person)

**Simulacros de Terremoto Great ShakeOut**

Orientación de Simulacros para Organizaciones (Por videoconferencia, en persona o ambos)

## Get Ready to ShakeOut.

October 16, 2025

Register: [ShakeOut.org](https://ShakeOut.org)

### ShakeOut Drill Manual

For Government Agencies and Facilities

**Are You Ready to ShakeOut?**

Major earthquakes are unpredictable catastrophes. With earthquakes as an inevitable part of our future, people should make plans and take actions to ensure that disasters do not become catastrophes. What do you do when you feel shaking or get an alert? This manual provides the information you need to prepare your organization for an earthquake. It is designed to help you prepare your organization for an earthquake. It is designed to help you prepare your organization for an earthquake. It is designed to help you prepare your organization for an earthquake.

**Drills for Government Agencies and Facilities**

Level 1 - Simple: Drop, Cover, and Hold On Drill

This drill uses simple steps to ensure all employees have to perform Drop, Cover, and Hold On. It is designed to be a good drill for non-emergency government entities to hold annually with the purpose of practicing their response. Furthermore, the level of your response and recovery efforts after a disaster.

Level 2 - Basic: Life Safety Drill

This life safety drill is designed to engage employees in a drill through their emergency response actions during an earthquake. The intention is to move and act in a way that is not a drill, but a real earthquake.

Level 3 - Intermediate: Life Safety and Continuity Planning Drill

This intermediate drill is designed to engage employees in a drill through their emergency response actions during an earthquake. The intention is to move and act in a way that is not a drill, but a real earthquake.

### Recommended Earthquake Safety Actions

Federal, State, and local emergency management experts and other official preparedness organizations agree that the actions described below will reduce injury and death during earthquakes.

In most situations, if you feel shaking or get an earthquake alert, immediately:

- DROPI!** where you are, onto your hands and knees. This position protects you from being knocked down and allows you to stay low and cover if shelter is nearby.
- COVER!** if sheltering: hold on to it with one hand; be ready to move with your shelter if it shifts.
- HOLD ON!** If you are unable to drop to the ground, sit and bend over, covering your head and neck with your hands and arms. If you use a car, keep it with you even if you are under a table to help hold you steady. If you use a wheelchair or walker with wheels (a rickshaw), LOCK your wheels and use the hand and wheel brakes. If you are in a vehicle, hold on to the seat belt and hold your head and neck with your arms, a pillow, a book, or a bag. If you are in a vehicle, hold on to the seat belt and hold your head and neck with your arms, a pillow, a book, or a bag. If you are in a vehicle, hold on to the seat belt and hold your head and neck with your arms, a pillow, a book, or a bag.

**ShakeOut!** People in California are encouraged to download the ShakeOut app to receive earthquake alert messages on their cellphones.

### ShakeOut Drill Arranged in English DRILL

**#ShakeOut** [ShakeOut.org](https://ShakeOut.org)



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# Plan to Practice

<b>Your Step 5 Action Plan</b> <i>Who will you practice with and when?</i>	
<b>People at home:</b>	<b>When:</b>
_____	_____
_____	_____
<b>People at work:</b>	<b>When:</b>
_____	_____
_____	_____
<b>Other groups:</b>	<b>When:</b>
_____	_____
_____	_____

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## Step 6: Improve Safety

**DURING**

- Evacuate if necessary
- Help the injured
- Prevent further injuries or damage



**[EarthquakeCountry.org/step6](https://EarthquakeCountry.org/step6)**

# Evacuation (If Needed)

- If there is **building damage, a fire, or other hazard**, safely go to your planned meeting place (Step 2).
- If you feel shaking and are **near the coast**, move to higher ground once you can safely move. Tsunami waves can arrive within minutes. Distant-source tsunamis may have official alerts and more time to evacuate. Learn more at [TsunamiZone.org](https://www.TsunamiZone.org).
- Remember to bring your Go-Bag!



[EarthquakeCountry.org/step6](https://www.EarthquakeCountry.org/step6)

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## Help the Injured & Prevent Damage

### Help the injured:

- Check your first aid kit for instructions or a first aid app.
- Ask permission before helping someone else.
- If someone is bleeding, put direct pressure on the wound.
- If someone is not breathing, provide hands-only CPR
- Do not move a seriously injured person unless there is danger of further injury.
- Call 9-1-1 to request medical help for serious injuries.

### Prevent further damage:

- Move or secure items that may fall during aftershocks.
- Use a fire extinguisher for small fires only.
- Shut off the gas only if you smell or hear a gas leak.
- Use flashlights instead of lighting candles or matches.

### Your Step 6 Action Plan

*What will you do **now**, so you can improve safety **after**?*

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[EarthquakeCountry.org/step6](https://www.EarthquakeCountry.org/step6)

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# Step 7: Reconnect and Restore

AFTER

- Restore daily life
- Reconnect with others
- Repair damage
- Rebuild community



[EarthquakeCountry.org/step7](http://EarthquakeCountry.org/step7)

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# Step 7: Reconnect and Restore

## The first weeks after the earthquake:

- If your gas was turned off, contact the gas company
- Visit [FEMA.gov/assistance](http://FEMA.gov/assistance) to learn what might be available.
- If you need repairs, check that contractors are licensed.
- Talk with others about how they are feeling, and help them seek counseling if needed.

## If you cannot stay in your home:

- Shelters may be overcrowded; staying with friends or family, or in a hotel, may also be options.
- Tell a neighbor and out-of-area contact your location.
- Only take your Go-Bag and essential items to a shelter.
- Have a plan for pets in case they cannot stay with you.

### Your Step 7 Action Plan

What else might you do **now** to speed your recovery? \_\_\_\_\_

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[EarthquakeCountry.org/step7](http://EarthquakeCountry.org/step7)

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# Safety Guidance in 16 Languages



[EarthquakeCountry.org/languages](https://EarthquakeCountry.org/languages)

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## Together We Prepare

- Start preparing *TODAY!*
- Share information with your family, friends, colleagues, personal support team, and other communities
- Become engaged in community preparedness groups & other stakeholder opportunities



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## Connect with ECA

- [EarthquakeCountry.org/bayarea](https://EarthquakeCountry.org/bayarea)
- [bayarea@earthquakecountry.org](mailto:bayarea@earthquakecountry.org)
- [Terremotos.org](https://Terremotos.org)
- [X.com/eca](https://X.com/eca)
- [Facebook.com/earthquakecountryalliance](https://Facebook.com/earthquakecountryalliance)
- [Instagram.com/earthquakecountryalliance](https://Instagram.com/earthquakecountryalliance)
- [info@earthquakecountry.org](mailto:info@earthquakecountry.org)



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## Q&A

Join ECA (free) be notified of future events, etc.  
[EarthquakeCountry.org/join](https://EarthquakeCountry.org/join)

Questions?  
[info@earthquakecountry.org](mailto:info@earthquakecountry.org)

Please complete our  
brief workshop survey:

[Surveymonkey.com/r/5RQT7QF](https://Surveymonkey.com/r/5RQT7QF)



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# ECA Activities & Opportunities

Mark Benthien  
Statewide California Earthquake Center (USC)  
ECA Executive Director

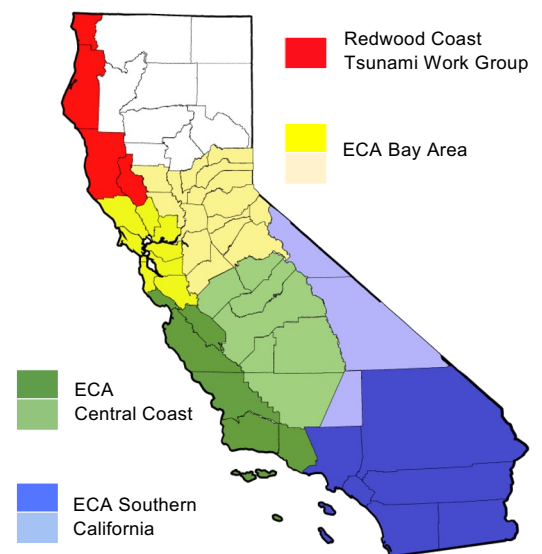
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## Earthquake Country Alliance

- 4000+ *Public-Private-Grassroots* leaders
- **Statewide committees** develop resources and deliver programs
- **Regional Alliances** organize meetings and outreach activities
- California's Office of Emergency Services provides FEMA NEHRP funding for ECA earthquake mitigation activities
- USC's Statewide California Earthquake Center (SCEC.org) administers ECA



Join: [EarthquakeCountry.org/join](https://EarthquakeCountry.org/join)



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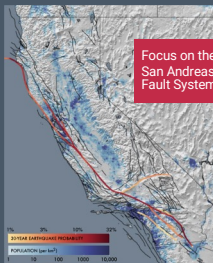
## Statewide California Earthquake Center

A collaborative research and education hub that brings together experts across geoscience and related fields

**SCEC's mission** is to develop and share cutting-edge earthquake system science to enhance California's resilience and to educate and inspire future scientists.

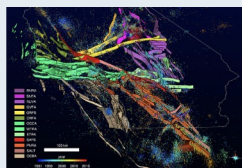
SCEC is a consortium of more than 90 institutions and a **community of over a thousand individuals**, guided by diverse leadership teams to fulfill the Center's mission.

### SCEC's Natural Laboratory and Study Area



Focus on the San Andreas Fault System

### Earthquake System Science and Innovation



SCEC integrates new research and technologies to enhance predictive system-level models and simulations to synthesize knowledge and quantify seismic hazards.

### Education and Workforce Development



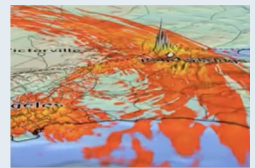
SCEC prepares the next generation of scientists through transformative research experiences, community building, and professional skills development.

### Outreach and Community Engagement



SCEC engages stakeholders across geoscience and related fields through workshops, drills, and collaborations to advance earthquake science, education, and preparedness.

### Earthquake Preparedness and Risk Reduction



SCEC bridges the gap between cutting-edge science and preparedness for a more resilient California, through education, research, and more realistic earthquake simulations.



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## ECA Statewide Activities

*Develop Messaging and Resources:*

[EarthquakeCountry.org](http://EarthquakeCountry.org)  
[EarthquakeCountry.org/resources](http://EarthquakeCountry.org/resources)  
[Terremotos.org](http://Terremotos.org)

*Support Tsunami Preparedness Week:*

[TsunamiZone.org/california](http://TsunamiZone.org/california)

*Created and Coordinate  
The Great California ShakeOut:*

[ShakeOut.org/california](http://ShakeOut.org/california)

*Webinars & other events*

[EarthquakeCountry.org/calendar](http://EarthquakeCountry.org/calendar)



**March  
21-29,  
2026**



**Oct. 15,  
2026**

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# ECA Outreach Bureaus (Regional & Statewide)

- **Events Bureau**

- Speakers for online/in-person events – **Join us!**
- Booths and tables at events
- Request presenter or information table:

**[EarthquakeCountry.org/eca-events](https://EarthquakeCountry.org/eca-events)**

- **Participation Bureau**

- ShakeOut and Tsunami Week recruitment and communications
- County/City Partners for local engagement

- **Communications Bureau**

- Statewide and local coordination
- Media event planning
- Year-round messaging / news releases
- Post-earthquake shared messaging



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## ECA Mini Awards

- **Purpose:** provide materials for ECA member projects that improve earthquake resilience by promoting mitigation, awareness, and preparedness, and multiply impact of programs
- **Purchases:** \$500 to \$1000 each
- **Eligibility:** Proposals for earthquake **mitigation** and **education** activities
- **New packages:** For 2026 you'll be able to fully customize the materials for your project (furniture straps, printed materials, etc.)
- **Next Application Period:** Spring 2026
- **Join ECA** so you will be notified ([EarthquakeCountry.org/join](https://EarthquakeCountry.org/join)) – free!

displayed.

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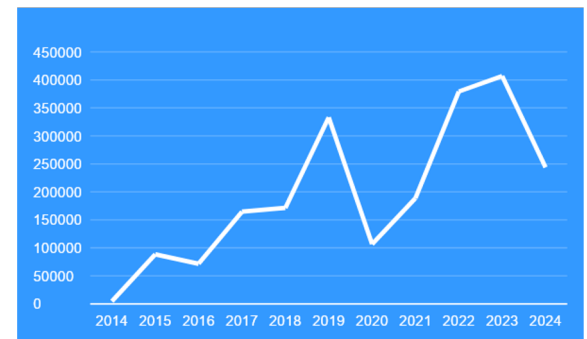
# ECA SoCal 2025 Mini Award Recipients

Healing Urban Barrios	2 furniture & file cabinet anti-tip fasteners, 1 tall storage cabinet fastener, 5 storage rack fastening kit, 1 tv straps, 8 home electronic straps, 3 table top equipment fastening system, 3 quakeHOLD! Putty
Corona Norco Unified School District Safety and Security	10 furniture straps, 5 bookcase and storage straps, 8 file cabinet straps, 5 tabletop equipment fastening system, 2 floor copier and laser printer fasteners, 5 QuakeHOLD! Gel
Corona Ranch Elementary	8 furniture bookcase & file cabinet anti-tip fasteners, 2 floor copier & laser printer fasteners, 2 standard refrigerator fasteners, 8 quakeHOLD gel
Dr. Augustine Ramirez Intermediate School	2 furniture straps, 3 floor copier, 3 standard refrigerator fasteners, 20 quakeHOLD! Putty, 10 a-maze-ing picture hooks
Ocean Hills Country Club Safety & Emergency Response Team Club	50 quakeHOLD! Putty , 25 quakeHOLD! Gel
Food for People Inc.	10 furniture straps, 12 file cabinet strap, 7 storage rack fastening kit
Chámmakilawish Pechanga School	5 furniture straps, 5 bookcase and storage straps, 5 file cabinet straps, 2 Seismolatch deluxe automatic cabinet latches, 2 QuakeHOLD putty, 2 QuakeHOLD Gel
Simi Valley Office of Emergency Services	2 tv straps, 3 home electronic straps, 1 Seismolatch automatic cabinet latch, 10 QuakeHOLD! putty, 10 QuakeHOLD! gel
First Congregational Church of Bakersfield	10 bookcase/storage straps, 4 file cabinet straps, 1 furniture bookcase/file cabinet fastener, 2 storage rack fastening kits, 2 tabletop equipment fastening systems, 2 cabinet door earthquake latches
High Desert Emergency Action Alliance	35 furniture straps, 15 bookcase and storage straps
kulturspace	25 water heater straps

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## California Tsunami Preparedness Week

- **2025: 434,000!**
- **2026 Goal: 500,000 Participants (year-long)**
- Simple actions to register your group:
  - Provide tsunami messaging to your employees, customers, etc. from TsunamiZone.org and @thetsunamizone (X, FB, IG)
  - Hold a Tsunami Walk
  - Conduct a discussion-based exercise
- Encourage large employers, universities, school districts to have activities or share guidance, and then register!



**TsunamiZone.org/california**

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## Quake Heroes



- 54-minute documentary featuring stories of people who experienced the 1994 Northridge earthquake in Los Angeles, and how they helped others
- Key moments tied to the *Seven Steps to Earthquake Safety*
- Scientists and engineers share how they informed the public about what happened, inspected damage, and learned lessons for reducing future losses.
- Encourages viewers to become trained (CERT, CPR, etc.) so they are prepared to help others
- A model for communicating risk and motivating whole community preparedness and mitigation
- Production sponsored by FEMA, NSF, USGS, Structural Engineers Association of Southern California, Simpson Strong-Tie, Hero in You Foundation, Safe-T-Proof, and others



**RETROSPECTIVE  
INTERVIEWS**



**ARCHIVAL NEWS  
FOOTAGE**



**CINEMATIC  
RE-ENACTMENTS**

**[QuakeHeroes.org](http://QuakeHeroes.org)**

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## Quake Heroes Events

- Organized to motivate preparedness actions by large community groups, businesses, local governments, and their members, employees, and constituents.
- Events may include panel discussion before the film with local leaders, scientists, engineers, etc.
- *Quake Heroes Expos*: After viewing the film, attendees explore a ***Seven Steps to Earthquake Safety*** resource and information fair where they can:
  - register for CERT and other trainings
  - receive free or low-cost disaster supplies & earthquake safety fasteners
  - learn about earthquake insurance & retrofitting
  - sign up for alerts
  - experience an earthquake simulator

Interested? Email **[info@quakeheroes.org](mailto:info@quakeheroes.org)**

**CITY OF MURRIETA**

**QUAKE HEROES**

FILM+EXPO



**March 15, 9 a.m. - 1 p.m.**

**Murrieta Public Library**  
Community Room & Garden

**8 Town Square**  
**Murrieta**

Register to Attend (free) at  
[EarthquakeCountry.org/murrieta](http://EarthquakeCountry.org/murrieta)

Watch an inspiring film based on true stories!  
Discounts on earthquake preparedness supplies!  
Program starts at 9:15 a.m.  
Ride an earthquake simulator!



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# Q&A

Join ECA (free) be notified of future events, etc.

[EarthquakeCountry.org/join](https://EarthquakeCountry.org/join)

Questions?

[info@earthquakecountry.org](mailto:info@earthquakecountry.org)

Please complete our  
brief workshop survey:  
[SurveyMonkey.com/r/5RQT7QF](https://SurveyMonkey.com/r/5RQT7QF)



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Please  
Complete Our  
Workshop  
Survey



[SurveyMonkey.com/r/5RQT7QF](https://SurveyMonkey.com/r/5RQT7QF)

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# **Short Announcements from Attendees (3-4 minutes each)**

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**What is something that you:**

learned  
will do  
will use  
will tell others

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# Connect with ECA

- [EarthquakeCountry.org](http://EarthquakeCountry.org)  
[EarthquakeCountry.org/socal](http://EarthquakeCountry.org/socal)
- [Terremotos.org](http://Terremotos.org)
- [X.com/eca](https://X.com/eca)
- [info@earthquakecountry.org](mailto:info@earthquakecountry.org)

