Plan Your Great ShakeOut Earthquake Drill!

National Drill: 10:18am on October 18, 2018

We'll Discuss:

- The value of an earthquake drill to your organization and community
- Earthquake risk in the Pacific Northwest
- Background of the Great ShakeOut drill
- How to join the Great ShakeOut drill
- How to plan an earthquake drill
- Additional resources

(Insert your Logo(s) here)

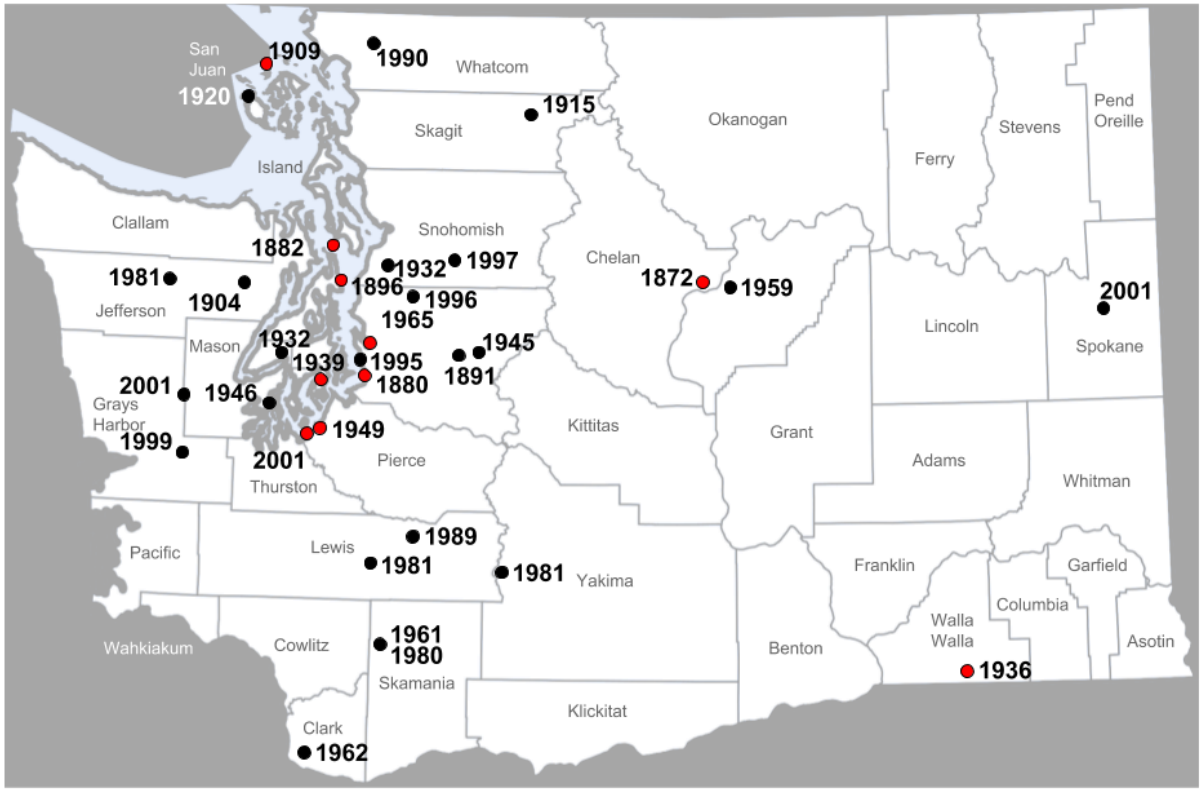
Why earthquake drills?

- Earthquakes are no-notice events
- What we do *now*, will determine what our lives will look like *afterwards*
- Encourages personal and staff preparedness
- Increases awareness of potential hazards
- Offers a chance to “do one more thing”
- Opportunity for individuals, families, and organizations to practice and improve preparedness

When the Earth Shakes – Animated Video: https://www.youtube.com/watch?v=YXxPTAhMGLI#action=share

Earthquake risk in the Northwest:

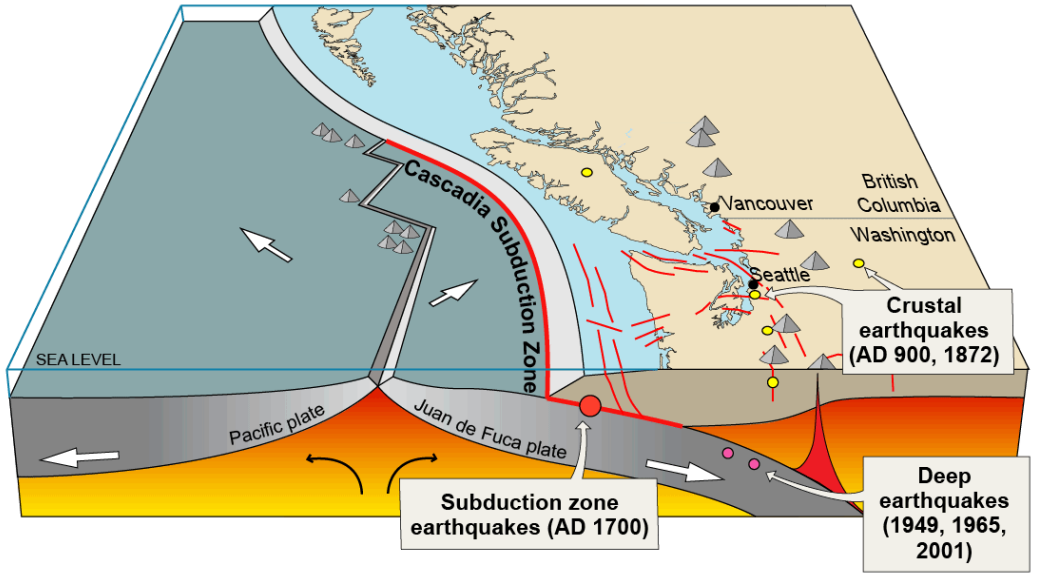
Significant Earthquakes in Washington Since 1872



● Earthquake
● Earthquake ≥ M 6.0

Other significant earthquakes felt in Washington:
(all ≥ M6.0)

June 23, 1946 British Columbia Earthquake
August 17, 1959 Hebgen Lake, Montana
October 28, 1983 Borah Peak, Idaho



Source	Max. Size	Recurrence
Subduction zone	M 9+	200–600 years
Deep Juan de Fuca plate	M 7+	30–50 years
Crustal faults	M 7+	Hundreds of years?

Volcano

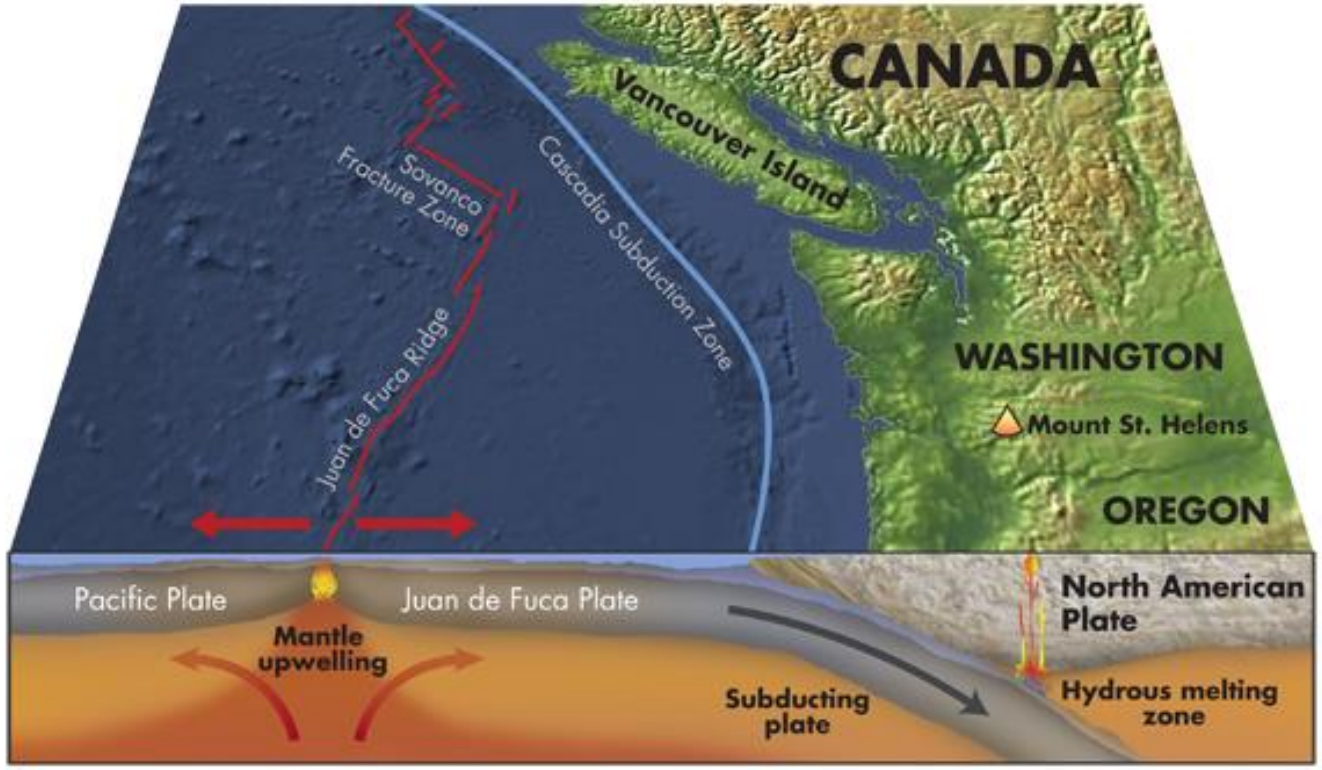
Active crustal fault

Active plate boundary fault

*figure modified from USGS Cascadia earthquake graphics at http://geomaps.wr.usgs.gov/pacnw/pacnweq/index.html

Earthquakes: Subduction Zone

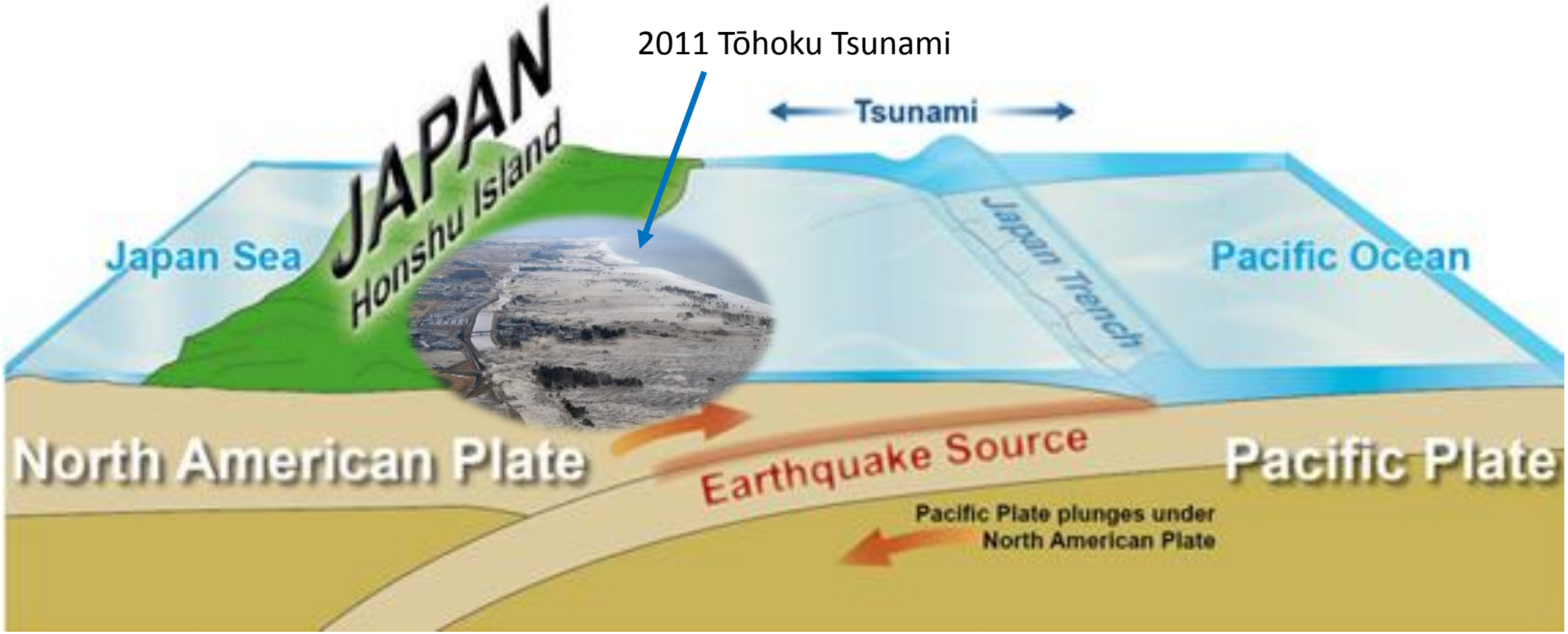
Cascadia



Last Cascadia Subduction Zone Earthquake in 1700

Earthquakes: Subduction Zone

Remember: 2011 Tōhoku Earthquake

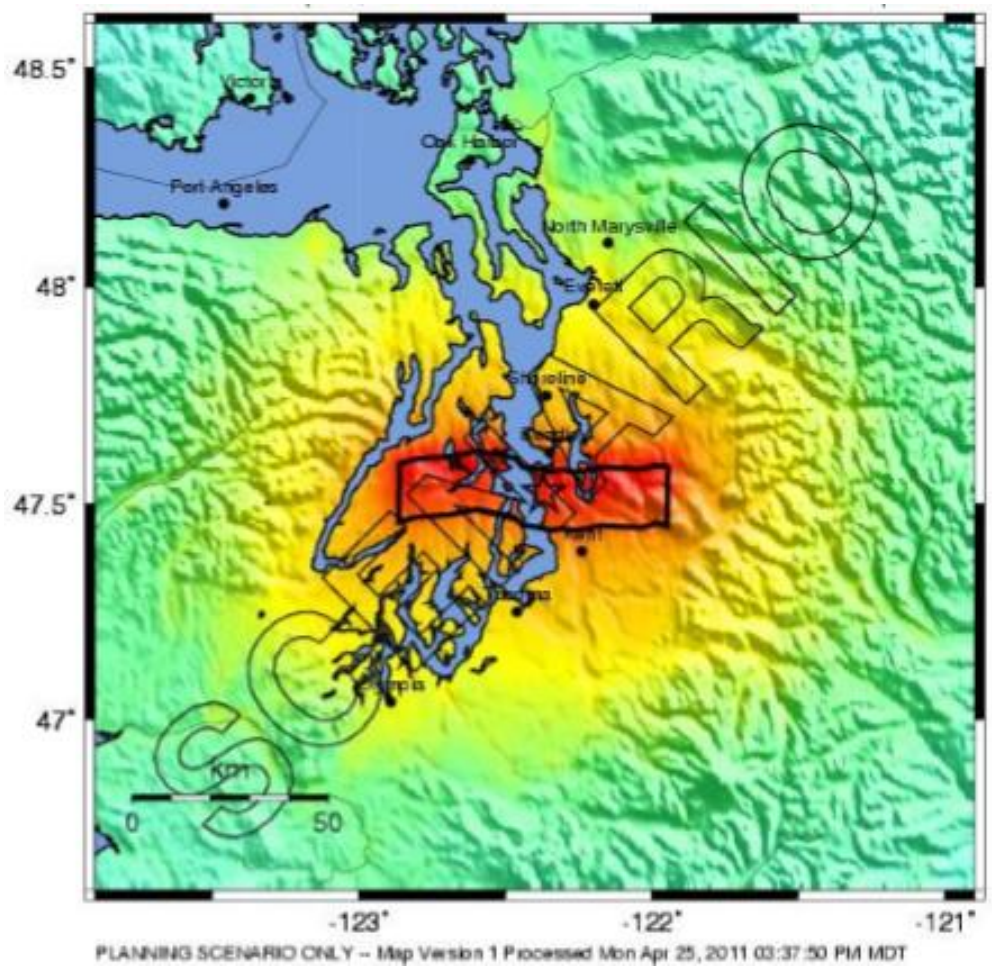


2011 Tōhoku Earthquake and Tsunami - $360 billion dollars in damage

Earthquakes: Deep

2001 Nisqually Earthquake - $4 billion dollars in damage in WA and OR

Earthquakes: Crustal Fault



SEATTLE FAULT SCENARIO EARTHQUAKE	
End-to-end length of fault (kilometers)	68
Magnitude (M) of scenario earthquake	7.2
Number of counties impacted	15
Total injuries (*severity 1, 2, 3, 4) at 2:00 PM	17,677
Total number of buildings extensively damaged	29,094
Total number of buildings completely damaged	9,062
Income losses in millions	$5,133
Displaced households	31,278
People requiring shelter (individuals)	18,193
Capital stock losses in millions	$19,868
Debris total in millions of tons	7.42
Truckloads of debris (25 tons per truckload)	296,720
People without power (Day 1)	265,583
People without potable water (Day 1)	399,991

Seattle Fault Simulation: M 7.2

Background of the ShakeOut Drill:

- World's largest earthquake drill
- 2017: Over 58 million global participants – over 19.9 million in U.S.
- 2018: Participate with us!

Why Drop, Cover, and Hold On?

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Flexible Drills:

Four different levels:

- Level 1 – Simple: *Drop, Cover, and Hold On* Drill
- Level 2 – Basic: Life Safety Drill
- Level 3 – Intermediate: Decision-Making Table Top Drill
- Level 4 – Advanced: Operations Drill

Drill manuals with suggestions for various occupations (businesses, schools, offices, etc.) are available online:

https://www.shakeout.org/resources/

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

- Quake-safe action to protect people from falling objects and furniture
- After at least one minute, announce the shaking is over and that employees can stand up again.
- Encourage employees to discuss their experience with one another

ShakeOut™

If you are near a sturdy desk or table

Level 2 – Basic: Life Safety Drill

- Designed to engage employees to think through their own emergency response actions during an earthquake
- Afterwards, review and discuss what worked well and what did not
- Lessons learned can help make improvements for next drill or actual earthquake

ShakeOut™
If you are near the shore

Level 3 – Intermediate: Decision-Making Table Top Drill

- Team designs scenario (see manual, p.5), determine scope & objectives
- Designed for key staff and leaders to think through more complex issues related to operations in the immediate aftermath of earthquake
- Document chronology of events, decisions, issues, & proposed solutions
- Debrief lessons learned and preparedness information with staff
- Update disaster plans based on lessons learned

Level 4 – Advanced: Operations Drill

- Focuses on crisis team personnel who are trained and have emergency response and/or recovery duties in your disaster plan
- Incorporates simulated incidents, decision-making, response, life safety aspects
- Scenario includes timeline, ‘injected events,’ post-EQ evacuation procedures
- Afterwards, debrief what worked or what did not in order to make changes for next drill or actual earthquake and update plan. Determine next steps.

AFTER the Drill

- Ask for feedback on how the drill went
  - Determine additional safety measures if needed
- Schedule the next annual drill
- Share photos and stories at www.ShakeOut.org
- Share lessons learned from drill to update plan/procedures
- Review “7 Steps to an Earthquake-Resilient Business” at www.earthquakecountry.org/roots
- Encourage employees to prepare at home using the 7 Steps to Safety http://www.earthquakecountry.org/sevensteps/

How do I join the Great ShakeOut Drill!!!??

Before the drill

- Register your organization as an official participant at www.shakeout.org
- Inform your employees of:
  - Date & Time of drill (**10:18am on October 18**, 2018)
  - How to correctly *Drop, Cover, and Hold On*, wherever they are
  - Your expectations for their participation (i.e. gathering place after, debrief)
  - Encourage others to register, participate, and receive earthquake information
  - Determine how or whether you'll involve general public in drill
- (Optional) Download realistic sound effects and safety information

Resources on www.shakeout.org

You can find:

- Recommended Earthquake Safety Actions (including situations when you cannot get beneath a table)
- Earthquake Preparedness Guide for People with Disabilities and Other Access or Functional Needs
- Seven Steps to Earthquake Safety
- Drill Manuals & Guides for a range of organizations & audiences
- Banners, Posters, and Flyers promoting the Great ShakeOut

And much more!


Join Us
for the
World's Largest
Earthquake Drill.
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www.ShakeOut.org

Thank you!