

2026 Northern California Earthquake Hazards Workshop

February 10 – February 12, 2026

USGS, virtual from Moffett Field, California

Pacific Standard Time (UTC-8)

Day 1, Tuesday, February 10

9:30-9:45 a.m. **Welcoming Remarks**

Christine Goulet, Earthquake Science Center Director (USGS)

Sarah Minson, Northern California Earthquake Hazards Program Coordinator (USGS)

John Grindle, Workshop Format (Grin Events)

9:45 a.m.-12:15 p.m. **I went to the reading of the will and all I got was this stress field: the effects of inheritance on seismic hazard**

Speakers [15 min each]:

Ray Weldon/Gene Humphreys (University of Oregon) *The tectonic history of California and how it lives on today*

Bob McPherson (Cal Poly Humboldt) *Intraplate Gorda earthquakes along inherited weak zones*

Kevin Furlong (Penn State) *Deciphering Crustal Structure in Northern California - Active Processes and Earthquake Implications*

David Shelly (USGS) *Low-Frequency Earthquakes Track the Motion of a Captured Slab Fragment at the Mendocino Triple Junction*

Discussion: 20 min

7th Inning Stretch: 5 min

Josie Nevitt (USGS) *Earthquake rupture arrest due to lithologically inherited depth-dependent frictional stability*

Michele Cooke (University of Massachusetts) *The impact of pre-existing weaknesses on strike-slip fault evolution: rupture maps from the 2019 Ridgecrest earthquake inspire scaled-physical experiments*

Zach Smith (UC Berkeley) *How Mechanical Anisotropy Shapes Fault System Evolution and Seismic Hazards over Multiple Earthquake Cycles*

Discussion: 20 min

Moderators: **Belle Philibosian** (USGS), **Alba Rodriguez Padilla** (Utah State University)

12:15-1:15 p.m. **Break**

1:15-2:15 p.m. **Thunder Talks I** [5 min each]

Moderator: **Grace Parker** (USGS)

Speaker 1 (affiliation 1), **Speaker 2** (affiliation 2), ...

2:15-2:30 p.m. **Break**

2:30-4:00 p.m. **Before, during, and after the earthquake: the latest in retrofits, loss modeling, and recovery**

Speakers [15 min each]:

David Bonowitz (David Bonowitz, S.E.) *An update on the state of seismic retrofit programs in the Bay Area*

John W. van de Lindt (Colorado State University) *Understanding the True Costs of Earthquakes to Vulnerable Communities using IN-CORE*

Selim Gunay (University of California, Berkeley) *Quantifying System Level Earthquake Early Warning Benefits Using UCERF3 Rupture Scenarios*

Ryan Kersting (Buehler) *Development of NEHRP functional recovery provisions (to support community resilience)*

Discussion: 30 min

Moderators: **Alan Poulos** (USGS), **Sharyl Rabinovici** (Sharyl Rabinovici Consulting)

4:00 p.m. **Adjourn day 1**

Day 2, Wednesday, February 11

9:30-10:30 a.m. **Thunder Talks II** [5 min each]

Moderator: **Grace Parker** (USGS)

Speaker 1 (affiliation 1), **Speaker 2** (affiliation 2), ...

10:30-10:45 a.m. **Break**

10:45-11:30 a.m. **What's happening? – News and events in northern California earthquake research**

Speakers [5 min each]:

Sara McBride (SSC) *California Seismic Safety Commission update*

Ayse Hortacsu (ATC) / **Robb Moss** (EERI) *EERI Learning From Earthquakes update*

Harold Tobin (UW) *CRESCENT update*

Ahmed Elbanna (SCEC) *SCEC update*

Albert Kottke / **Chris Madugo** (PG&E) *PG&E update*

Jill Franks (USGS) *External awards update*

Discussion: 15 min

Moderator: **Anne Wein** (USGS)

11:30 a.m.-12:30 p.m. **Break**

12:30-1:30 p.m. **Thunder Talks III** [5 min each]

Moderator: **Grace Parker** (USGS)

Speaker 1 (affiliation 1), **Speaker 2** (affiliation 2), ...

1:30-1:45 p.m. **Break**

1:45-3:30 p.m. **Surf's up: tsunamis in San Francisco Bay and the West Coast**

Speakers [15 min each]:

Nathan Wood (USGS) *National assessment of population exposure, evacuation potential, and average annualized losses in the U.S. to earthquake-generated tsunami threats*

Summer Ohlendorf (NTWC) *A Look Inside NOAA Tsunami Event Response*

Angel Ruiz-Angulo (University of Iceland) *SWOT Satellite Altimetry Observations and Source Model for the Tsunami from the 2025 M8.8 Kamchatka Earthquake*

Pat Lynett (USC) *Observations of the 2025 Kamchatka Tsunami in California*

Jay Patton (CGS) *Tsunami Hazards of the San Francisco Bay Area*

Discussion: 30 min

Moderators: **SeanPaul La Selle** (USGS), **Stephanie Ross** (USGS)

3:30-3:45 p.m. **Break**

3:45-5:00 p.m. **That which was is already done, and that which is destined to be, already was: models of rupture recurrence**

Speakers [15 min each]:

Mike Oskin (UC Davis) *Earthquake-cycle modality revealed by paleoseismic inter-event time distributions*

Leah Salditch (Guy Carpenter) *Modelling Long-Term Fault Memory*

Luca Dal Zilio (Earth Observatory of Singapore) *Rupture across fault stepovers: What physics-based models tell us about seismic hazard*

Discussion: 30 min

Moderators: **Kelian Dascher-Cousineau** (Utah State University), **Morgan Page** (USGS)

5:00 p.m. **Adjourn day 2**

Day 3, Thursday, February 12

9:00-10:30 a.m. **Doing it for ourselves: community-led disaster preparedness and recovery**

Speakers [15 min each]:

Serra Rea (California Foundation for Independent Living Centers) *Disability on Shaky Ground: Peer-Led Disability Community Emergency Preparedness*

Chase Donnell (Climate Resilience Communities) *Uplifting Community Voices: Climate Resilience Communities' Guide to Building Resilience*

Seth Schalet (Santa Clara FireSafe Council) *Mitigations That Matter The Most: How Wildfire Preparedness Aligns With Earthquake Preparedness*

Daniel Aldrich (Northeastern University) *A Tale of Two Cities: Examining Organizational Networks in Disaster-Affected Communities*

Discussion: 30 min

Moderators: **Dana Brechwald** (San Francisco Bay Conservation & Development Commission),

Alessandra Jerolleman (Loyola New Orleans College of Law)

10:30-10:45 a.m. **Break**

10:45 a.m.-12:15 p.m. **Every Sunday it brooded and lay on the floor, inconveniently close to the drawing-room door:**

Alquist-Priolo zones and inconvenient fault locations

Speakers [15 min each]:

Austin Elliott (Geologist at large) *New evidence of creep on the urban Concord fault*

Robert Sickler (USGS) *Seismic imaging of range front faults, on the San Francisco Peninsula, in the city of San Carlos*

Judy Zachariasen (CGS) *How are faults added to and removed from the Quaternary Fault Database and Alquist-Priolo Zones?*

Danielle Mieler (City of Alameda) *Addressing sea level rise and liquefaction in areas of bay fill*

Discussion: 30 min

Moderators: **Tim Dawson** (CGS), **Keith Knudsen** (USGS)

12:15-1:15 p.m. **Break**

1:15-2:00 p.m. **Thunder Talks IV** [5 min each]

Moderator: **Grace Parker** (USGS)

Speaker 1 (affiliation 1), **Speaker 2** (affiliation 2), ...

2:00-2:15 p.m. **Break**

2:15-3:45 p.m. **Who's there? An earthquake?: a roundtable discussion on communicating about earthquakes**

Speakers: **Brian Hackney** (CBS5/KPIX), **Paul Rogers** (San Jose Mercury News), **Steven Sobieszczyk** (Department of the Interior), **Ross Stein** (Temblor), **Monika Stoeffl** (California Resiliency Alliance)

Total time: 90 min

Moderators: **Max Schneider** (USGS), **Mark Benthien** (SCEC)

3:45 p.m. **Concluding Remarks**

4:00 p.m. **Adjourn**