



Cal OES

GOVERNOR'S OFFICE
OF EMERGENCY SERVICES

California Earthquake Early Warning Advisory Board Meeting

December 6, 2023




Roll Call

- Secretary of Natural Resources Agency
- Secretary of California Health and Human Services
- Secretary of Transportation
- Secretary of Business, Consumer Services, and Housing
- Speaker of the Assembly Appointee representing the Interests of Private Businesses.
- Governor's Appointee representing the Utilities Industry
- Senate Committee on Rules Appointee representing County Government
- Chancellor of the California State University
- President of the University of California

Opening Comments





Review of Minutes

May 10, 2023



Recent Events

Derek Lambeth, Program Manager, Earthquake Early Warning



Almanor Earthquake M5.5

May 11, 2023

- 3,938 MyShake devices alerted, and approximately 100,000 android users alerted.
- Over 9,000 MyShake App downloads.
- Notable Aftershocks:
 - M5.2



Ojai Earthquake M5.1

August 20, 2023

- 194,168 MyShake devices alerted, and approximately 5.6 million android users alerted.
- Over **43,000** MyShake App downloads.
- Notable Aftershocks:
 - 3 M3.9



Isleton M4.2

October 18, 2023

- 389,394 MyShake devices alerted, and approximately 1.3 million android users alerted.
- Over 19,000 MyShake App downloads over a three-day period, following event.



USGS Presentation Placeholder



Discussion

Tell us about your experience(s) with these recent earthquake events:

- Did you receive an alert?
- What reactions/discussions occurred as a result of these events?



Sector-Based Implementation



Regatta Seaside Presentation Placeholder



Discussion

What challenges do you foresee in implementing EEW in your sector and how can we overcome the current restrictions (i.e., building codes) with installation of certain EEW features?

How can we address policy that will allow for full implementation of the system?



Discussion

What are some of the unique risks/situations associated with your sector that must be considered when implementing EEW?



Research and Development



UCB Presentation Placeholder



Discussion

How could agencies within your sector benefit from this new technology?



System Operations Update

Derek Lambeth, Program Manager, Earthquake Early Warning



CEEWS Network Goal of 1,115 Stations November 2023 Status



975 (+38) stations in CA
contributing to **ShakeAlert**™

140 stations to go!!



CEEWS System Operations Overview 2016-2023



Caltech



Sensor Build Out Status

- Completed **691** new and updated EEW/real-time stations, bringing the total contributing to EEW to **975**.
- Connected **113** EEW stations to the existing State Microwave.

* **Red** text indicates completion since last EEW AB meeting

	Funded New/Updated EEW Stations	Completed	Remaining
CA Geological Survey	232	230 (+18*)	2
US Geological Survey	161	161 (+19*)	0
UC Berkeley	152	143 (+14*)	9
Caltech	133	133 (+40*)	0
Department of Water Resources (DWR)	24	24	0
Total	702	691 (+91*)	11

	Funded EEW Microwave Connection	Completed	Remaining
Communications	350	113 (+19*)	237



CGS Presentation Placeholder

Education and Outreach



Jon Gudel, Senior Emergency Services Coordinator
Yvette LaDuke, Program Manager, Earthquake, Tsunami, Volcano



Cal OES and San Jose Earthquakes Partnership

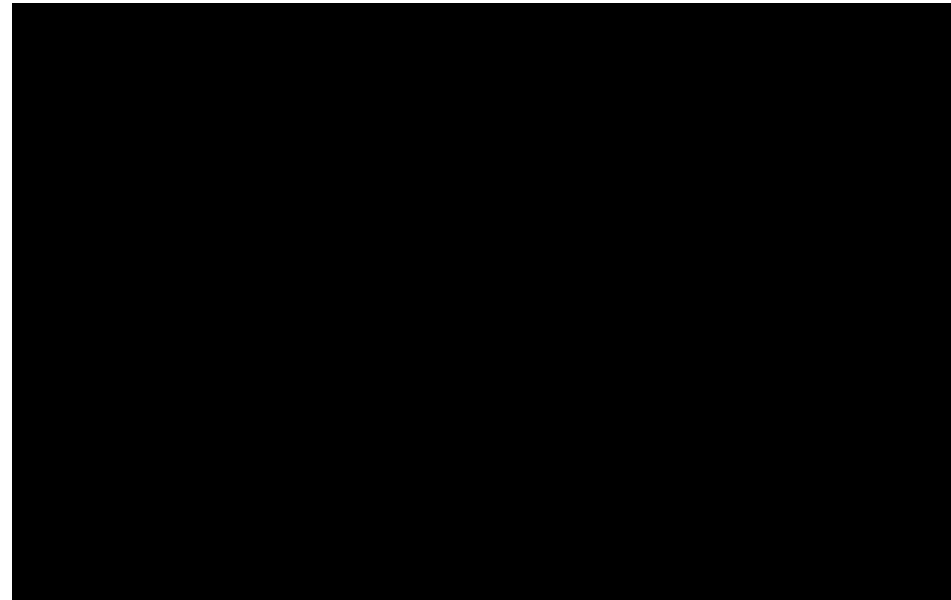
2023 CAL OES PARTNERSHIP OBJECTIVES

1. Enhance public safety by driving substantial growth in MyShake App downloads
2. Educate and encourage **Businesses** to have a plan (Earthquake Preparedness)
3. Educate and encourage **Californians** to have a plan (Earthquake Preparedness)
4. Support San Jose Earthquakes' community as an earthquake education hub
5. Showcase earthquake preparations in PayPal Park
6. Deliver education messages to thousands of attendees and followers

Cal OES Inside Look



- Integrate EEW System into large public venues.
- Interacted with thousands of fans (Stanford Stadium +40K)
- Established a strong relationship with the San Jose Earthquakes leadership team and Team 408 partners
- Maximized marketing opportunities throughout the Bay Area region



San Jose Earthquakes Partnership with Cal OES Video
(<https://www.youtube.com/watch?v=3RpjSm0RGj4>)



Game Day Assets

- Two (2) minutes of Digital LED Signage per game
- One (1) :30 commercial on English Radio Broadcast
- One (1) :30 commercial on Spanish Radio Broadcast
- Video Board. One (1) thirty-second (:30) Video Board message with PA read





Player Videos Watch the Player Videos



Spanish



English



EARTHQUAKE SIMULATOR

- 1250+ Earthquake Simulator Riders
- 1550+ Outreach Booth Visitors





In-Game Stadium Messaging

- With attendance at PayPal Park growing 4.7x since 2021, permanent assets see a large value boost.
 - EST. 7.2M Impressions
 - 138,893 Total Attendance
 - 8,161 MyShake App Downloads





Great California ShakeOut Presentation Placeholder



Discussion

Given the success and lessons learned from the partnership with the San Jose Quakes, what similar partnerships could exist within your sector?



Finance

Lori Nezhura, Deputy Director, Planning, Preparedness & Prevention



EEW Budget Update

2023-2024 Spending Plan

- \$17.1 million on-going General Fund approved.
- With dedicated funds to:
 - Continued outreach in DEI communities
 - Airport Feasibility Study
 - Distributed Acoustic Sensing (DAS)
 - System Operations
- One-time funding for Datacasting

The background of the slide features a large, semi-transparent version of the California State Seal. The seal is a shield with a gold field containing a white grizzly bear standing on its hind legs, facing left. Above the bear's head is a five-pointed pink star. The top of the shield is filled with gold rays emanating from behind the star. The shield has a light blue border.

Cal OES Director Closing Comments



Advisory Board Member Closing Comments



General Public Comment

Adjournment

