

CALIFORNIA
EARTHQUAKE EARLY WARNING
ADVISORY BOARD

SEPTEMBER 11, 2024
MEETING NOTICE



***Cal* OES**

GOVERNOR'S OFFICE
OF EMERGENCY SERVICES



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**CALIFORNIA EARTHQUAKE EARLY WARNING
ADVISORY BOARD MEETING
NOTICE AND AGENDA**

September 11, 2024
1:00 PM – 4:00 PM

In-Person Location:

3650 Schriever Avenue, MPR 1 & 2
Mather, California 95655

Zoom Video Conference Information

Participant Call-In Number: 1-669-444-9171
Meeting ID: 868 1707 0842 | Passcode: 56264174

Or, please click the link below to join the webinar:

<https://us02web.zoom.us/j/85145287076?pwd=1yxOXP7luMXqDmvWYjL4XD5G26Or60.1>

Passcode: 6MvKKM+s

Or One tap mobile:

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Dial (for higher quality, dial a number based on your current location):

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CALIFORNIA EARTHQUAKE EARLY WARNING ADVISORY BOARD MEETING

September 11, 2024
1:00 PM – 4:00 PM

MEETING AGENDA

There will be an opportunity for public comment following each agenda item.

I. CALL TO ORDER / INTRODUCTIONS

The Director of Cal OES provides opening remarks, followed by roll call.

II. REVIEW AND APPROVE MEETING MINUTES

After review, Board members vote to approve the previous Advisory Board Meeting Minutes.

III. RECENT EVENTS

Earthquake Early Warning (EEW) Program Manager provides information on recent real-world tests of the California Earthquake Early Warning System.

IV. SECTOR-BASED IMPLEMENTATION

Cal OES and partner presentations on current EEW implementation projects and successes.

V. RESEARCH AND DEVELOPMENT

Partner presentation on new technologies and projects that support the EEW System.

VI. SYSTEM OPERATIONS

Cal OES updates the Board on the CEEW system build out, followed by partner presentations on operation and maintenance projects.

VII. EDUCATION AND OUTREACH OVERVIEW

Cal OES presents on community outreach opportunities and events.



VIII. FINANCE

Cal OES reviews the EEW budget and 2023/2024 Business Plan.

IX. CLOSING STATEMENTS AND PUBLIC COMMENT

Cal OES Director provides closing comments, followed by final opportunity for public comment.

X. ADJOURNMENT



Meetings of the California Earthquake Early Warning Advisory Board are open to the public except when specifically noticed otherwise in accordance with the Bagley-Keene Open Meeting Act. The Board may act on any item listed on the agenda. Agenda items may be taken out of order to facilitate the effective transaction of business.

Statements from the Public:

Members of the public will be given an opportunity to comment before action is taken on any agenda item and during the scheduled Public Comment section of the agenda. Comments should be addressed to the Board and should be limited to 3 minutes or less. Although not required, speakers are requested to identify themselves by stating their name and city of residence for the official record. All remarks shall be addressed to the Board as a body. Speakers should be brief and are to limit their comments to the subject of discussion.

Access to Meeting and/or For More Information:

Individuals who require special accommodations, or to receive meeting materials, contact the individual below at least seven (7) days prior to the scheduled meeting date:

Samantha Layne, Earthquake Early Warning
3650 Schriever Avenue, Mather, CA 95655
916-396-2700 / samantha.layne@CalOES.ca.gov

**TDD users may contact the California Relay Service TDD line at 1-800-735-2929
or Voice Line at 1-800-735-2922.**

This meeting notice is made available online, please visit the Cal OES California Earthquake Early Warning Program, Advisory Board [webpage](#).



CALIFORNIA EARTHQUAKE EARLY WARNING **ADVISORY BOARD**

MEETING MINUTES
December 6, 2023





**PREVIOUS MEETING
MINUTES**

**California Earthquake Early Warning
Advisory Board**

California Governor's Office of Emergency Services
3650 Schriever Avenue, Mather, 95655 California
and via Zoom

December 6, 2023

Meeting Minutes

Members Present:

In-Person Attendees

- Nancy Ward, Director, Governor's Office of Emergency Services
- Christina Curry, Chief Deputy Director, Governor's Office of Emergency Services
- Lori Nezhura, Deputy Director, Planning, Preparedness, Prevention, Governor's Office of Emergency Services

Remote Participants

- Bryan Cash, Assistant Secretary, Designee of the Secretary of Natural Resources Agency
- Lori Pepper, Deputy Secretary, Designee of the Secretary of the California State Transportation Agency
- Melinda Grant, Undersecretary, Designee of the Secretary of the California Business, Consumer Services, and Housing Agency
- Lupita Sanchez-Cornejo, Corporate External Affairs for AT&T, Appointee of the Speaker of the Assembly Representing the Interests of Private Businesses
- Jeff Toney, Director, County of San Diego Office of Emergency Services, Designee of the Senate Committee on Rules Appointee Representing County Government
- Amina Assefa, Program Manager of Emergency Management and Business Continuity, Designee of the President of the University of California (UC)

I. Call to Order / Introductions

- The meeting was called to order by Advisory Board Executive Officer Derek Lambeth.
- Roll call was taken, and a quorum was achieved.
- Cal OES Director Nancy Ward opened the meeting with remarks that expressed gratitude towards all stakeholders and partners for their role in advancing operational strategies and the implementation of the Early Earthquake Warning (EEW) system and provided an overview of the meeting's agenda. She also extended a warm welcome to Jeremy Lancaster, introducing him as the new State Geologist with CGS.
- Jeremy Lancaster provided brief remarks reiterating CGS' support for the Cal OES mission and discussed the development of a strategic plan emphasizing CGS' role in supporting emergency services, including geological events that pose hazards to public safety and infrastructure.

II. Review and Approve Meeting Minutes from May 10, 2023.

- The motion to approve was led by Board Member Sanchez-Cornejo. The motion was seconded by Board Member Cash. Motion passed unanimously.

III. Recent Events

- Executive Officer Derek Lambeth provided an update on earthquakes occurring since the last board meeting in May 2023, along with the subsequent number of MyShake downloads and notable aftershocks.
- Doug Given, Geophysicist and USGS EEW Coordinator discussed the magnitude overestimation for the Isleton Earthquake.
- Robert de Groot, USGS ShakeAlert Coordinator, discussed high latencies and other issues around ShakeAlert-powered WEA deliveries for the Ojai Earthquake.
- Board Member Assefa asked whether the 5-second Alert Pause that is in place to account for potential overestimations would limit who is informed if the initial estimation is accurate. Given noted that it depends on the size of the actual earthquake; however, the reasons for including the pause outweigh not having it in place.
- Board Member Toney asked whether the ShakeOut test location being San Francisco was deliberate and cautioned that the test location could cause public confusion. De Groot suggested this would be better answered by UC Berkeley colleagues as the test was not a system

occurrence, it was specific to MyShake.

IV. Sector-Based Implementation

- Robert Sides, HOA General Manager of the Regatta Seaside Condominiums discussed steps taken to implement EEW in the condominium building, including determining risk management, the benefits, and the challenges encountered in implementation.
- Sides provided insight into how Cal OES can help similar HOAs implement EEW, including:
 - Adopting a formal set of policies to get high-rises started with EEW and ShakeAlert
 - Legislative options
 - Outreach to over 50,000 HOAs throughout California
 - Financial incentives
- Director Ward requested further clarification on the specific reasons behind the initial hesitation of the HOA board to approve the implementation of the EEW system. Sides clarified that it was a financial challenge rather than understanding the benefit of the technology.
- Board Member Pepper inquired about the integration of elevator recall systems, referencing an ongoing study on similar technology in airports. She sought to understand the specific challenges the HOA encountered in implementing such a system. Sides replied that elevator recall is considered a major benefit; however, the elevator contractor who owns the operating system was told by the city/county officials this could not be done. Director Ward asked if a reason was given for denying permission and Sides responded the contractor did not provide specifics but suspects a code issue is causing hesitancy and fear of changing the system. Board Member Pepper wondered if testing with other systems currently in place, such as a fire system, needs to be done to show EEW would not infringe on other systems and Sides agreed, saying there is a need for multiple systems to act as a backup during an emergency.
- Deputy Director Nezhura inquired if the implementation of the EEW system has yielded any advantages, specifically regarding the enhancement of home values and the reduction in insurance premiums for individual homeowners within the HOA. Sides responded the Regatta focuses on risk management and that insurance brokers feel that EEW gives them a lot of assurance, having a positive impact on insurance rates and coverage. However, it can depend on a broker's understanding of the technology

and willingness to negotiate.

- Executive Officer Lambeth stated Cal OES continues to explore the topics and issues Sides raised in the presentation and that having a diverse Advisory Board allows for greater possibility in addressing issues and policies.

V. Research and Development

- The Operations Manager with Berkeley Seismology Lab, Julien Marty, provided a review of the test alert that was sent out on October 19, 2023, and discussed the MyShake Desktop/Chromebook app that is currently under development, emphasizing its suitability for professional settings where desktop computers are predominantly used for work. Marty then described the benefit of implementation on Google Chromebook and targeting schools for deployment of the MyShake app.
- Board Member Assefa inquired about the data and cybersecurity measures embedded in both the software and hardware components discussed. In response, Marty stated the commitment to security includes thorough and systematic reviews of the software, specifically targeting potential vulnerabilities, conducted prior to the software's official release. Deputy Director Nezhura reiterated that Cal OES coordinated with the State Threat Assessment Center and the California Cybersecurity Integration Center to ensure compliance with state security protocols.

VI. System Operations

- Executive Officer Lambeth provided updates on the system build-out.
- Hamid Haddadi of the California Geological Survey provided an update on the California Integrated Seismic Network Display Standalone Application functions and new developments, including the ability to serve as a real-time earthquake display, provide customized features and views for emergency responders, and act as a redundancy for access to earthquake information. Haddadi also introduced the newly developed QuakeWatch Web Application, which was developed to provide more advanced functions and a more user-friendly interface. In conclusion, Haddadi discussed the Community Seismic Network (CSN) pilot project, which will collocate CSN packages with high-resolution California Strong Motion Instrumentation Program instruments at ten (10) ground response stations and one (1) building, to record earthquakes by both instrument types, and to evaluate the usability of CSN records.

- Deputy Director Nezhura requested information regarding the origins of the traffic data on QuakeWatch. Haddadi noted that there are public access web sources that provide traffic information but would need to follow up to provide specifics. Deputy Director Nezhura restated the benefits this will have to first responders.
- Board Member Pepper reiterated the importance of the availability of this information for first responders and those who assist first responders, such as transit operators.

VII. Education and Outreach

- Jon Gudel, Senior Emergency Services Coordinator with the EEW program, provided an update on the pilot partnership with the San Jose Earthquakes Major League Soccer team, including a review of assets, metrics, and outcomes.
- Director Ward noted that the Earthquakes announced the building of additional training fields and facilities in Santa Clara, so there may be additional opportunities for partnerships moving forward.
- Deputy Director Nezhura noted that she had the opportunity to meet with the Earthquakes' president who expressed the desire to educate fans and encouraged continued relationship building with community partners. Board members should work with Cal OES on any ideas for other partnerships that can further EEW.
- Board Member Toney noted the work San Diego OES had done with the San Diego Padres that had a similar impact.
- Board Member Assefa suggested the provision of giveaways at events in addition to providing information, particularly earthquake putty because it is a good tool people are not likely to purchase. Executive Officer Lambeth stated some items are currently used as giveaways, but Cal OES can consider other items and tools like the earthquake putty.
- Yvette LaDuke, Program Manager, Earthquake, Tsunami, Volcano briefed on the recently completed Great California ShakeOut Tour, including locations, a focus on equity, outcomes, and media coverage.
- Director Ward noted the greater impact of a tour rather than a singular event because it reaches a wider, more diverse audience.
- Board Member Grant applauded the outcomes of the tour.

VIII. Finance

- Deputy Director Nezhura provided an overview of the financial budget and spending plan. She informed the board a report was submitted to the state legislature regarding funding opportunities. This report will be sent to board members and made available on the Cal OES EEW website.

IX. Closing Comments

- Director Ward thanked the partners at USGS, UC Berkeley, CGS, and Special Speaker Robert Sides. She iterated that the input from board members is critical to the EEW program and encouraged them to remain engaged, bring ideas, and continue to represent their constituencies.
- Board Member Pepper suggested including the Gov Ops agency in future board meetings, and to look for opportunities to streamline procurement.

X. Adjournment

- The meeting was adjourned by Executive Officer Lambeth.