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**ALFRED E. ALQUIST
SEISMIC SAFETY COMMISSION MEETING**

Zoom Teleconference and In-Person Meeting
January 19, 2023

I. Call to Order

The meeting was called to order by Cindy Silva, Chair, at 10:31 a.m. Tanya Black, Administrative Processes Manager, conducted the roll call.

Commissioners Present:

Cindy Silva, Chair
Fuad Sweiss, Vice Chair
Representative Astghik Hakobyan for Anthony Portantino
Ida Clair
Alegria De La Cruz
Debra Garnes
Representative Irina Brauzman for Mia Marvelli
Kevin McGowan
David Rabbitt
Nancy Ward (Departed at 11:57am)
Representative Lori Nezhura for Nancy Ward
Vincent Wells

Commissioners Absent:

Joone Kim-Lopez
Mia Marvelli
Dr. Kit Miyamoto

II. Approval of Seismic Safety Commission September 15th, 2022 & November 4th, 2021, Meeting Minutes Discussion:

The Seismic Safety Commission (SSC) discussed the meeting minutes of September 15th, 2022, and November 4th, 2021. Motion to approve by



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Commissioner Garnes, seconded by Vice Chair Sweiss. Motion passed unanimously.

III. Chair's Remarks

Chair Silva welcomed the SSC and discussed the recent occurrences of rain and shaking in Northern California. Chair Silva welcomed the new SSC Executive Director Annde Ewertzen and invited Director Ewertzen to a few opening remarks.

Director Ewertzen shared that she is looking forward to working with the SSC and will later discuss the actions taken since she was appointed.

IV. Humboldt County Earthquakes Update

- Speakers**
- Annde Ewertzen, Executive Director, SSC**
 - Yvette LaDuke, Earthquake, Tsunami, and Volcano Program Manager, Cal OES**
 - Commissioner Garnes, SSC & Mayor of Rio Dell**

Executive Director Ewertzen shared that Yvette LaDuke, California Governor's Office of Emergency Services (Cal OES) Seismic Hazards Branch (SHB), and Commissioner Garnes, Mayor of Rio Dell, will be presenting to the SSC today. She explained that this disaster is not going to rise to a presidential declaration and there are ongoing efforts by Cal OES' Recovery Division to assist localities with their recovery efforts.

Ms. LaDuke stated that the M 6.4 earthquake in the Humboldt County occurred at about 2:34 a.m. on December 20th and that there was no tsunami danger for the California coastline.

The 287 aftershocks have occurred based on the program's final report on January 13th. There have been three large aftershocks following the incident (M 5.4, M 4.9, and M 4.4). Building damage was presented.

The Earthquake Early Warning (EEW) System sent out an alert during the earthquake, Google delivered just under 3 million ShakeAlert powered alerts to Android cellular phones. Over 271,000 devices were alerted via the MyShake App on iPhones and a Wireless Emergency Alert (WEA) was issued via the IPAWS system. Areas that were alerted were demonstrated to the SSC.



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In response to this earthquake, Cal OES activated the State Emergency Operations Center with 24/7 coverage. Fire And Law Branches deployed Support Field Response activities. Cal OES participated in coordination for the Local Assistance Center, supplied water for areas without water and under boil water notices, and supplied resources to support sheltering operations. Cal OES deployed Recovery Teams that are working with residents in the area.

In addition, the Safety Assessment Program (SAP) conducted inspections in Rio Dell with personnel from the Department of General Services (DGS) and CalTrans. A total of 1,942 assessments, which included reassessments, were conducted on 1,387 structures. Of those 1,039 were green tagged and safe to occupy, 257 were yellow tagged with restricted use, and 91 red tagged structures and were unsafe to occupy. In addition to the SAP Safety Inspections, Rio Dell officials independently conducted some assessments.

Representative Nezhura clarified that SAP has a registry of trained and eligible inspectors that would be provided to the local jurisdiction so they can contact them to do assessments. From the beginning, Humboldt County and the city of Rio Dell stated that it wasn't going to be possible for them to do so the state took it on, and it became a state project. DGS and Caltrans were mission tasked to complete the inspections with most assessments completed by Caltrans staff. After the aftershocks, structures were reassessed, and it was found that the quake hit a different area than the original. Brand new buildings that hadn't been impacted by the first quake were now showing some sort of damage and a lot of the newly tagged structures were in the Rio Dell area.

Federal Emergency Management Agency (FEMA) did some assessments at the Bear River Band of the Rohnerville Rancheria.

Cal OES cohosted along with the California Geological Survey (CGS), the Earthquake Engineering Research Institute (EERI), and the US Geological Survey (USGS) a virtual Earthquake Clearinghouse and three briefings to share field observations were completed. Photos of the types of damage that the field reconnaissance staff saw were demonstrated and included a chimney, damaged crawlspace, mobile home failure, and damage to the Ferndale or Eel River Bridge.



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Representative Nezhura discussed her experience with the MyShake App alert, the area covered by the Early Warning System, and the minimal delay in the alert due to the first incident being offshore. She invited Commissioner Garnes to share her firsthand experience.

Commissioner Garnes provided her experience through this earthquake. She also provided the impact to the community of Humboldt and how the recovery process is going. She thanked Senator McGuire and Assembly Member Wood and discussed Cal OES inspectors helping with the homes during the holidays and expressed that Cal OES has done everything they can including assisting with getting a water grant application moving.

Discussion:

Vice Chair Sweiss stated that the photos and damage remind him of the 1989 Loma Prieta Earthquake and asked if some damage could've been prevented or what can be done today to prevent future damage. Increasing awareness among cities and encouraging the adoption of ordinances can make a difference in the future to help save lives and property.

Commissioner Garnes discussed things that could have been prevented such as water heaters that weren't strapped down properly and retrofitting not being done because funds are not available.

Representative Nezhura explained the Earthquake Brace & Bolt (EBB) Program, which is a seismic retrofit reimbursement program. Another program is EEW. The Mendocino area and Humboldt area, especially where the earthquake hit, probably has the highest percentage of individuals that have downloaded the apps on their mobile devices, just because of the sheer number of earthquakes that occurred since EEW was activated in 2019. Implementing automated actions and alerts for businesses or critical infrastructure and possibly extending it into people's homes to help mitigate some of the damage is being worked on. Representative Nezhura stated that the solutions need to be found while utilizing the ones available today.

Director Ewertsen shared that the EBB Program recently received a grant that provided supplemental grants to socially vulnerable populations. In addition, the ability for the permit and estimate to be paid immediately was built into the program to assist people without immediate means. Part of the program requires water heaters to be braced and inspected as part of the retrofit. She



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explained that apartments aren't part of the EBB program. An EBB registration was recently completed but the earthquake occurred before the program rolled out.

Chair Silva asked Commissioner Garnes to describe the population and community of Rio Dell.

Commissioner Garnes stated Rio Dell has 3,450 residents and was established around 1840 and incorporated as a city in 1965. It is a small community that has a chamber, Kiwanis, a police department with seven officers, and a volunteer fire department. It does not have a lot of businesses, and a few were lost during COVID. Businesses were impacted from the earthquakes and lack of water. She stated that as a small town it would be difficult to reach the \$65 million threshold required for FEMA assistance.

It has been through several natural disasters such as the '92 Earthquake and the '64 Flood and remained whole during COVID. The city is two years into a five-year plan to redo roads without asking taxpayers for the funds and with the recent earthquakes, repaired roads and underneath the water system obtained more damage that will need to be addressed.

Chair Silva asked Director Ewertsen to describe the opportunity to visit Rio Dell and Ferndale.

Director Ewertsen stated that Jia Wang-Connelly, SSC's structural engineer and she will be visiting next week to view damage and meet with local jurisdictions. There is an opportunity for the SSC to hold a meeting and hearings in Rio Dell and Ferndale, as has been done in the past after previous disasters, at the end of May or beginning of June. A report will be completed following the meeting and can hopefully address what can be done to make the community seismically safer.

Chair Silva discussed passing on the findings from what happened to other communities, particularly of small size, to prepare and provide a better response.

V. AB 100 Reporting - California Department of Water Resources



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**Speaker – Taylor Kanaan, Security and Emergency Management Program,
Department of Water Resources**

Ms. Kanaan provided an overview of the Department of Water Resources (DWR). DWR's mission is to sustainably manage the water resources of California, in cooperation with other agencies to benefit the state's people and protect, restore, and enhance the natural and human environments. DWR is committed to public safety and has numerous planning and management activities for seismic safety throughout California. The main ones are the development, operation, and maintenance of the California State Water Project (SWP) and the Dam Safety Flood Protection and Emergency Management Programs.

The Division of Operation and Maintenance (O&M) manages the SWP; the Division of Engineering provides engineering, geology, construction, geodetic, and administrative services to the SWP and public, state, and federal agencies; and the Division of Operation and Maintenance takes care of the SWP Monitoring. DWR constantly monitors seismic activity with a network of state-of-the-art equipment in more than 100 locations. The Division of Engineering focuses on studies and design guidelines. The Division of Safety of Dams (DSOD) provides oversight to the design, construction, and maintenance of approximately 1,240 non-federal jurisdictional-sized dams in California. The DSOD is a regulatory agency and only provides oversight. DSOD are constantly inspecting and evaluating the dams with respect to the advances in earthquake engineering. The DWR's full report will be available on the website: www.ssc.ca.gov.

Discussion:

Chair Silva stated that the scope of the DWR is tremendous, and she thinks some of the dams in the state, such as Oroville, are probably not under the department's authority.

Ms. Kanaan explained that the SWP has the 36 dams that DWR operates and maintains. Oroville is one of them.

Chair Silva asked if the 36 dams are of the scope of those shown and are not small dams in local communities.



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Ms. Kanaan confirmed and explained that DSOD consists of local dam owners on a smaller scale except for a few, such as those demonstrated, but the SWP dams can be quite large.

VI. Updates from FEMA Western Integration Group

Speaker – Anne Rosinski, Earthquake Program Manager, FEMA Region IX

Director Ewertsen introduced Ms. Rosinski and thanked her for joining the SSC. Ms. Rosinski last updated the SSC at the July 27th, 2022, meeting. FEMA Western Integration Group (WIG) comprises Earthquake Managers from FEMA Region VIII, IX, and X and FEMA's ongoing efforts will be presented. Ms. Rosinski explained that although funding is limited, actions can still be taken and the inspiration behind the Seismic Western Integration Group is working together.

Ms. Rosinski stated that the Seismic Benefit Cost Module Update recommendations was a joint project that Commissioner Lopez got going. Seismic Benefit Cost Analysis' (BCA) are one of the biggest hurdles to seismic mitigation projects being funded and a top priority. The FEMA Benefit Cost Modules are very problematic, and headquarters commissioned the RAND Corporation to do a study on all of FEMA BCAs, not just seismic. In anticipation of the results of that report, headquarters funded the BCA team to make some improvements to the BCA. Ms. Rosinski stated that as far as she knows, the RAND report still has not been published and was supposed to be out in August of last year.

Ms. Rosinski stated in early 2022, BCA recommendations were submitted for unreinforced masonry school and soft-story structure retrofits. She also mentioned other projects she is working on with colleagues include the Earthquake Insurance Information Project. She stated that earthquake insurance isn't cheap but is a resource that's available. The draft was sent to the FEMA headquarters team who make recommendations, and then the team will make final edits and have the project out this year.

Ms. Rosinski stated FEMA is also working on EEW and ShakeAlert fact sheet that will include a message about mitigation to make sure the public understands



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that EEW is not the only tool that should be used. Ms. Rosinski stated a lot of feedback on the updated document is expected and headquarters is open to and pleased to see it.

The Contract Support in Region IX, or the Community Education and Risk Communication (CERC) Team, has funds of \$80k to go towards writing of an Earthquake Planning and Mitigation Application Guide. The WIG started the guide last year and interviews have been conducted with external partners to learn best practices. The draft document should be available by the end of the fiscal year and the final document should come out in 2024.

Ms. Rosinski has previously conducted a multi-hazard inventory workshop and explained that inventories are the gateway to mitigation and are particularly important for seismic.

Ms. Rosinski stated different ways to approach seismic mitigation work include developing a project, insurance, and doing inventories or BCAs. Over the last year, these approaches have gained momentum and hopefully by 2024, outreach and training will be available. An increase in the number of seismic projects submitted will be the measure of success in the approaches.

Discussion:

Commissioner Garnes thanked Ms. Rosinski for the presentation and asked if there is a way for the government to engage with insurance companies. Earthquake insurance is expensive regardless of the deductible and a reasonable way to meet the deductible is needed for individuals to invest in insurance.

Ms. Rosinski explained that the outreach materials being developed for earthquake insurance includes a call to action to talk to the insurance agent. The CEA is working hard to engage with partners and manage costs and funds in the event of a disaster. She explained the details of a new product called a parametric insurance policy that has no deductible, and an affordable monthly flat fee is available.

Director Ewertsen stated that earthquake insurance in high-risk areas can be expensive and explained that the deductible is not paid out-of-pocket. It



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determines when the insurance is going to kick in. Any damage over the amount of the deductible would be the amount the homeowner or renter may receive from their claim. For this earthquake, SBA included a low-interest loan that could be used to cover the deductible amount and repair the home.

Ms. Rosinski stated that the message conveyed is to reach out to an insurance agent. Cascadia Region Earthquake Workgroup created a hub online with earthquake insurance information for general public, educators, decision makers, and policy influencers.

VII. Seismic Safety Commission Reports 2022

Speaker – Salina Valencia, Director of Legislation & Communications, SSC
– Tanya Black, Administrative Processes Manager, SSC

Director Ewertsen introduced Salina Valencia, SSC's Director of Legislation & Communications to provide an update on the Summary Report as required under AB 100.

The Summary Report for 2022 is an overview of the work the SSC has done over the year and includes the SSC's statute, funding sources, and projects. Ms. Valencia asked the Commissioners to review the report and provide any feedback by February 2nd. The report will be available on the SSC website as well as the AB 100 Reports. The California DWR Report will be submitted to the legislature and posted on the website.

Ms. Black, Administrative Processes Manager, explained that there are two documents (a letter and report) pertaining to the California Research and Assistance Fund (CRAF), which must be submitted on an annual basis. In 2007, SSC was awarded a \$6 million settlement from the California Attorney's General Office (AG) for earthquake reduction. The SSC must submit a letter and annual report to the AG office. The report outlays projects completed in the previous year, money spent, and activities throughout the fiscal year.

Ms. Black stated no projects were completed and provided the fund balance. Ms. Black requested any Commissioner edits for the letter and report should be



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provided to SSC staff before February 2nd. Director Ewertsen noted that SSC has encumbered funding for a project which will utilize monies from the CRAF.

Director Ewertsen noted that Chair Silva identified an omission in the 2022 Summary Report. The Commercial Property Owner's Guide was not included and that will be corrected.

Discussion:

Chair Silva reminded the Commissioners that any additional comments on the reports are due Thursday, February 2nd.

Chair Silva made a motion to approve the document with provided edits including the addition of the Commercial Property Owner's Guide publication. A second was made and the motion passed unanimously.

VIII. Chair and Vice Chair Election Policy Update

Speaker – Annde Ewertsen, Executive Director, SSC

Director Ewertsen discussed the SSC Election Policy. She stated the policy had not been updated since 1997 and the proposed policy was drafted to memorialize the practices, add structure where missing, and revise past practice to make processes more apparent. She also stated that SSC staff had worked with both Cal OES legal counsel and Cal OES Executive leadership on the updated policy.

She noted under the new policy elections for SSC Chair and Vice Chair will take place at the next meeting.

Chair Silva announced that the second meeting of the year will incorporate the election of Chair and Vice Chair for the subsequent year. Roles will be assumed at the conclusion of the next meeting after the election has occurred.

Discussion:

Commissioner Garnes asked to clarify if the roles are for the fiscal year and when the next meeting will occur.



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IX. Miscellaneous Announcements

Director Ewertsen introduced Jia Wang-Connelly, SSC Senior Structural Engineer to give an update. Ms. Wang-Connelly stated that SSC's involvement with UCSD Shake Table test for the 10-story cold-formed steel building is ongoing. The actual test is likely to occur in May 2024 based on the projected schedule.

Ms. Ewertsen thanked the SSC for appointing her as Executive Director and shared her excitement to work with the SSC to help make California seismically safer. Director Ewertsen thanked the staff for their warm welcome and the expertise they have provided.

Director Ewertsen shared her experience in the first 90 days including meeting members of the SSC and other various entities and working on several small projects with other Cal OES units. She discussed the status of the outdated Strategic Plan and plans to update, ongoing work to correct broken links and outdated information, and the addition of new resources on the website. After the Strategic Plan is completed, the SSC website will be reevaluated to align the Strategic Plan and information presented.

SB189, or the Multifamily Housing Retrofit Program for apartment buildings, allocated \$250 million to be appropriated in this year's state budget. The January budget does not include the \$250 million because of the fiscal status of the state and will be reevaluated next January to determine if funding is available.

Ms. Black will be sending a notification to remind Commissioners of the deadline date for Form 700 filing for 2022.

Last year, Lori Dengler presented to the SSC on tsunamis and her book, *The Voyage of Kamome*. At that time, she asked for assistance in translating the book to other languages and Vice Chair Sweiss volunteered to translate the book to three languages. He announced the translations were completed.

X. Public Comment

No public comments at this time.



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XI. Adjourn

The meeting was adjourned at 10:31 am by Chair Silva.