



State Of California  
**SEISMIC SAFETY COMMISSION**



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*Executive Director*

California Seismic Safety Commission's  
Ad Hoc Committee on Tsunami Safety  
Minutes of Meeting  
August 12, 2005

### **Committee Members Present**

Chief Donald Parker, Chairman (City of Vallejo)  
Mr. Linden Nishinaga (City of Long Beach)  
Mr. Orville Magoon (Coastal Zone Foundation)  
Dr. Lori Dengler (Humboldt State University)  
Dr. Lucile Jones (CSSC/USGS)  
Mr. Richard Eisner (OES)  
Mr. Daniel Shapiro (CSSC)  
Jeff Terry (LAOES)

### **CSSC Staff Present**

Mr. Richard McCarthy  
Mr. Robert Anderson  
Mr. Henry Reyes  
Mr. James Lee

### **Speakers**

Mr. Dan Larkin, Humboldt OES  
Mr. Allen Winogradov, Del Norte County OES

### **Call to Order**

The Seismic Safety Commission's Ad Hoc Committee on Tsunami Safety Chairman Mr. Donald Parker called the meeting to order at 10:00am.

Minutes of the July 28 meeting in San Francisco – changes: Jones-be consistent with titles/names throughout the minutes.

Page 3-PG&E not URS

Target Senators from the counties in which tsunamis are more likely to occur.

Parker: Minutes stand as read.

**Executive Director Richard McCarthy – Review of Priorities of Report**

Members of the California Seismic Safety Commission and staff had meetings with 13 California state senators on a variety of different issues this week. The Commissioners went around to try and get some legislation through. They met with four senators yesterday and many of them asked about this report. They've heard about it, particularly Senator Florez's staff and he mentioned OES has been working with him in improving state response from the June 14<sup>th</sup> event.

There were questions about how can we assist in the funding as far as state funding. They're not talking about federal dollars. The state is in debt but if this issue is brought forward enough you'll see a lot of requests from some of these senators and they'll take a look at funding sources that can help.

Need a good executive summary. That's all the senators are going to read but their staff will read the whole document. The executive summary should be kept at one page, simple and straightforward, with a lead in sentence and one paragraph followed with your findings and recommendations. They were told the release date will be on the anniversary of the Andamon event and they were happy about that.

It will get a lot of media coverage as I've had a lot of media calls, they're asking about the document. .

Parker: You mentioned state senators. I think we to also target... Our audience for this report is for the state legislature in general. But we have to target in particular those legislators from the coastal counties. They're the ones that have the risks and the interest. They all have offices within their own districts. Perhaps we could identify the ones we could drop in early and say we want to give you a heads up on this.

Eisner: There should be something in here about June 14<sup>th</sup> based on what you've done since then. How you're trying to reach out to local governments and target what the needs are. That's kind of what they're looking for. Some action has been taken since June 14<sup>th</sup>.

Terry: I agree with Rich on that. Frankly I think there was a very even and honest airing of concerns and also some directions for cooperation.

Parker: We do have a section in the report that's going to address the June 14<sup>th</sup> issue. As a layperson, as a first responder, that's the kind of stuff I want to hear. I heard Jeff Terry talk about that loud and clear.

The Governor of Washington, Michelle Gregoire, held a tsunami press conference on Monday, August 8, 2005 on their concerns of how the cities are certified as Tsunami Ready by the weather service. They feel the criteria is so vague and meaningless that it doesn't mean that you're in fact tsunami ready, but that you have a warning system, you have public education materials and you have something. That's not really tsunami ready in their opinion.

Winogradov: Crescent City was deemed tsunami ready 2-1/2 years ago and one benefit has been an increased awareness and request from businesses for tsunami safety information

McCarthy: One final point: I received an email from the Coastal Commission. They have made some recommendations for you to consider which will be provided in the draft report.

### **Speakers**

Parker introduced the next order of business on the agenda is Mr. Dan Larkin, Program Coordinator of Humboldt County Office of Emergency Services and Mr. Allan Winogradov, Emergency Services Coordinator Del Norte County Office of Emergency Services. We, the committee members, want to know how your organizations responded to the OES tsunami alert and warning after June 14<sup>th</sup> event on Crescent City. : It's very important to this project and ultimately for all of the state's residents.

Winogradov: Humboldt/Del Norte readiness. I'm going to give you a little background on Humboldt County and Mr. Larkin will give you a little background on Del Norte County. For those of you who don't know where we are we are the furthest northern and western counties in California. We have two thousand square miles, 45 miles of coastline with a total population of 27,000. We have a tourism-based economy and our population is three times larger over the summer months and probably five times over Fourth of July. We have three major areas that are at Malibu/Smith River, Crescent City where our main population is and the mouth of the Klamath. In both counties we do local presentations for

schools. Del Norte County assisted Crescent City in the second installation of the siren. I worked with our local phone company and I created a tsunami information page. Every phone book has emergency preparedness instructions. It's basically what to do as well as an evacuation map.

Larkin: Humboldt County is a little bit bigger. We're almost 3,600 square miles with one hundred ten miles of coastline of which 75% plus of that are bluff coastline, cliffs. Population is 129,000 and we are a tourism, fishing, and lumber based economy and we have a larger population in the summer time but not to the extent that Del Norte does. Vulnerable areas are around the Humboldt Bay area, Coastline from Trinidad to Centerville and Shelter Cove community just north of the Mendocino/Humboldt county line. It's a pretty expensive community; a lot of nice homes in there and some of them are very close to the beach.

Winogradov: Del Norte preparation prior to June 14<sup>th</sup> included: 1) Installed second tsunami warning system, 2) Assisted Crescent City in gaining tsunami ready status, 3) tsunami information page in the local phone book and a hotel/motel tsunami page, 4) RV Park Tsunami Information Flyer, 5) How to Survive a Tsunami in Crescent City Flyer, 6) Presentation for local schools and community groups and 7) tsunami and earthquake information booth in the County Fair.

Del Norte June 14<sup>th</sup> event response: 1) Local earthquake is felt by residents, 2) Numerous businesses and private citizens began self evacuation, 3) Tsunami siren/evacuation started by on NOAA warning, both wireless and land line phone systems became overloaded and partial EAS failure, 4) No ability to communicate with local radio/media, 5) Evacuated four thousand people in 45 minutes with 15 emergency services personnel, 6) Self evacuation far exceeded the immediate needs of the public and 7) An "All Clear" was issued over a local radio station by non-county personnel.

Del Norte future needs/plans: 1) Continue public tsunami preparation presentations, 2) Coordinate with local Chamber of Commerce to increase presence of tsunami flyers, 3) Purchase and install information kiosks at beach access points, 4) Create and comprehensive public awareness campaign, 5) Coordinate tsunami efforts with local, state and federal agencies and 6) Gain tsunami ready status for the county.

Larkin: Humboldt preparation prior to June 14<sup>th</sup>: 1) How to survive a tsunami in Humboldt County flyer, 2) Tsunami preparation presentation for local schools and community groups, 3) Tsunami & earthquake information booth at the county fair and 4) Tsunami contingency plan/coordination.

Humboldt County June 14 what happened: 1) A local earthquake is felt by residents, 2) Numerous business and private citizens began self evacuation, 3) EAS activated with 10 minutes of event, 4) Level 1 EOC activated within 10 minutes of event and operating with two plus persons within 20 minutes of event, 5) Both wireless and land line phone systems became overloaded and partial EAS system failure, 6) Observers dispatched to ocean overlooks within 25 minutes of event, 7) Active and planning measures with NEWS office to cancel TWB once verification received from WCATWC and 8) All clear issued by county EOC and broadcast by EAS within minutes of WCATWC cancellation notice.

Humboldt future needs/plans: 1) Continue public tsunami preparation presentations, 2) Coordinate with local Chamber of Commerce to increase present of tsunami flyers, 3) Create and install public information kiosks at beach access points, 4) Create a comprehensive public awareness campaign and 5) Coordinate tsunami efforts with all local, state and federal agencies.

### **General Discussion on Committee's Task and Suggested Findings and Recommendation for the Draft Report**

Together the meeting concluded that the Report's title be "The Tsunami Threat to California." They also agreed the subtitle should also be kept short and simple, "Recommendation on tsunami hazards."

The cover is to be as simple as possible, and continue the theme of tsunami threat to California. We got a risk that isn't really an obvious recommendation to that threat and our citizens don't know about it.

There should be guidelines to help locate site critical infrastructures and a need to have better planning.

The acknowledgements and commission address can be placed in the last pages of the report.

Suggested Findings:

1. There are tsunami hazards in California from local, regional and distant sources

2. California is not adequately informed, directed, nor educated about tsunamis and level of tsunami risks and many are unaware of how to respond to natural or official warnings.
3. A major tsunami in California will significantly affect the economies of the entire nation by damaging and/or disrupting port infrastructure, operations and trans-pacific international trade and commerce.
4. The present tsunami warning system does not adequately serve the needs of the California coast communities
5. Present codes and guidelines do not address the interaction of tsunami surges and structures, critical infrastructure or loose materials likely to be displaced by waves.
6. Advances in tsunami science and engineering are needed to provide the information necessary to assist decision makers with land use and mitigation decisions. Tsunami hazards are not adequately address in the State multi-hazard mitigation plan.
7. There are community-based programs that can significantly improve education, planning and coordination and should be expanded statewide.

#### Suggested Recommendations:

1. Top recommendation was to develop an education program for continuing the education for adults and in the schools for children so that California citizens know the risks they face and how to deal with them.
2. Codes and standards could be improved to mitigate damage as well as having higher building standards, high-risk walls for low elevation areas.
3. A comprehensive tsunami hazard assessment risk analysis and action plan is needed for the California Ports.
4. That NOAA brings in outside experts like oceanography, seismology, and engineering emergency managing community to evaluate the protocol of warnings and make sure it matches with the needs of communities.

5. Bring in an outside group of subject matter experts to help decide what major things should go into the report. The suggestion was to have an extra panel but that didn't go over very well as most believed that a larger group instead of just a panel should evaluate protocol.
6. A suggestion was to have somebody put together a document with pieces that were sent around before organized around those concepts, as California needs to develop a California-only requirement for tsunami safety.
7. Select the strongest recommendation and just improve that one for the time being

Staff was asked to review and evaluate the suggested findings and recommendations, combine them to reduce them to approximately to five and arrange the recommendations in the same order as the findings.

Chairman Parker adjourned the meeting at 3:00 pm.