



The

Broadcasters' Desktop Resource

www.theBDR.net

... edited by Barry Mishkind – the Eclectic Engineer

EAS Alert

CA Fire Sparks Key Discussions



By Richard Rudman

[December 2018] The largest and most deadly fire in California history burned over 153,000 acres, took nearly 90 lives, 19,000 structures, and \$10 Billion in damages. Much of the damage and deaths happened in a short few hours.

Reviewing the event, the California State Hearing on November 17th focused on how to approve altering and save lives. Much of the information and lessons can be a great help to emergency managers and agencies around the country. Richard Rudman summarizes the discussion and shares points any alerting group, SECC, LECC, or state and local EMs should consider to enhance public safety during any disaster.

Santa Barbara County office of Emergency Management Director Rob Lewin really hit the point when he said: “Alerting becomes the Achilles Heel of evacuation when it comes too late or doesn’t reach enough people to prevent loss of life.”

CONVENING TO IMPROVE

California State Senator Hanna Beth Jackson and Assembly members Monique Limon and

Marc Levine conducted a joint informational hearing on alert and warning issues on November 71, 2018 in Carpenteria. The title: *On the Alert: Strengthening California’s Public Warning System.*

Hannah Beth is the Chair of the Joint Legislative Committee on Emergency Management. Monique and Marc are the Assembly Co-chairs. Chairman Jackson noted that this hearing comes almost a year to the date of the start of the Thomas Fire in Santa Paula on December 4, 2017, the record holder for the largest wildfire until the recent Camp Fire.

Absent from those invited to give testimony at the hearing was the National Weather Service (NWS). NWS routinely issues more emergency public alert and warning messages than all other sources combined.

Their part in the California warning picture extends beyond weather emergencies to helping CHP disseminate AMBER Alerts (child abductions) and all weather-related warnings affecting life and property that are frequently issued before or at the same time as government warn-

ings. Quite often Weather Service warnings go out well in advance of any other government agency warnings.

A REAL CONCERN

In her opening remarks Senator Jackson noted that the Camp Fire now holds the dubious honor of being the largest and most destructive wildfire for life and property in our State's history. She quoted Governor Brown saying that wildfires are the "existential crisis of our time."

Senator Jackson said later in the hearing that she is concerned that only 45 of the 58 counties in California have implemented advanced warning technologies that have been designed by FEMA.

During the hearing, participants brought up several other issues including problems with immediate evacuation warnings to the elderly, disabled, those who do not speak English, or people who have pets, including horses and other large animals, that need to be cared for in special locations since most evacuation shelters do not have resources for such care.

MULTILINGUAL CONCERNS

Assemblywoman Limon's introductory remarks homed in on improving warnings in languages other than English.

One problem she identified is that not all English terms and language used in emergency public warnings translate accurately from English to Spanish.

Another warning problem she outlined has been identified *due to the speed that recent wildfires spread, there is often less notice for people at risk to evacuate.*

Quoting her fellow State Assemblyman James Gallagher referring to the Camp Fire: "No one expected it to move that fast."

BEYOND "VERY AWARE"

Although the Paradise community was in Gallagher's opinion "very fire aware," Limon said Gallagher believes we have to "up our game."

However, Holly Crawford, director of San Diego's Office of Emergency Services testified that only 550,000 of the County's 3.3 million residents have registered their mobile phones for emergency warnings. Senator Jackson commented, "Getting people to opt into the system has not been as successful as we would like."

Deputy Director Medigovich's outline of SB 821 offered hope through its "opt out" provision for improvement statewide in mobile phone emergency alert sign-ups.

ZEROING IN ON THE AFFECTED AREAS

Crawford brought up the problem of alerts that often go out to a much wider area than necessary.

While the technology exists to solve this problem, wireless providers have yet to make changes to their systems to better target warnings to people directly at risk.

Crawford also testified that San Diego County has addressed a serious issue that has been identified with FEMA's Integrated Public Alert and Warning System (IPAWS). While this may seem like a minor point, there are eighteen cities in San Diego County, each with its own elected government.

All eighteen have their own fire departments. Eight have their own police departments. The City of San Diego alone has a police department, a fire and rescue department, harbor police force and a lifeguard service.

While it is possible for every government jurisdiction in San Diego County to issue IPAWS-based public emergency messages, San Diego County recognized that the public could

be subject to conflicting information if every city agency has that capability.

If all their elected officials and agencies has FEMA-authorized IPAWS warning authorization, the County as the legally mandated entity for public warning, recognized the possibility for confusion due to lack of coordination during regional and even local emergencies.

For that reason, San Diego County has taken the proactive step to act as a central IPAWS warning clearinghouse to reduce the chances for the public receiving conflicting information.

WIRELESS PROVIDERS OFTEN MIA

Chairman Jackson, in reaction to testimony, wanted to know that since “we rely of wireless telephone companies ... how involved are the providers?”

The answers were not encouraging.

While testimony was given that the providers were active in recovery, experts said that much more should be expected of them to install the latest warning technology so warnings can be issued more accurately – and to build systems to public safety standards of reliability.

Currently much of the wireless world still depends on utilities for pole and underground equipment power, and this infrastructure that includes fiber and wire technology has been proven to have major vulnerabilities to wildfires and other disasters. Some testimony indicated that it has been difficult to get providers involved in a dialog to solve identified problems.

Other local elected and appointed officials weighed in. Senator Henry Stern from Canoga Park had a rental home in Malibu that was destroyed in the Woolsey Fire. He said that the foremost need for state officials to address is “how to get the most accurate real time data out there.”

A NEED FOR GUIDELINES

Santa Barbara County Emergency Manager Brian Uhl wants clear guidelines from our state for protocols for issuing emergency warnings for evacuations. Other officials offered similar comments in their testimonies.

Uhl’s boss, Santa Barbara County office of Emergency Management Director Rob Lewin brought up personal experience with WEA cell phone alerts. He testified that a WEA message that should have been received by all cell phones in the affected area in Santa Barbara only came up on one of his two cell phones.

While Director Lewin did not know the reason for this, differences in behavior in handling WEA messaging have been documented to both service providers and to how different types of smart phones process and display alerts received from carriers.

ALERTING MUST NOT BE DELAYED

Director Lewin’s testimony also included this thought: “Alerting becomes the Achilles Heel of evacuation when it comes too late or doesn’t reach enough people to prevent loss of life.”

He went on to outline how the 58 counties each have individual plans for evacuations instead of what Lewin called a common approach. “In subsequent news coverage “blame is placed, however inappropriately in the light of hindsight and some corrections are made.” But, when disaster strike again in other counties, Lewin continues, they may not recognize a problem and may not know of lessons learned from previous incidents.

Lewin then called for “convening a diverse group of experts to focus on evacuation alerting and provide a foundation for all the counties.” Lewin’s testimony ties in with the goal of creating CalOES action plans for better coordination and use of all types warning technologies.

BETTER WARNINGS VIA LEGISLATION

After testimony was given on recent wildfires in Northern and Southern California from fire officials, Mitch Medigovich, Deputy Director of Logistics Management for the Governor's Office, outlined current warning improvement legislation.

There are several worth consideration

Senate Bill 833: *The Legislature finds and declares that the safety of local communities requires designated alerting authorities to ensure they have multiple operators, adequate testing and training, and functional equipment and software. It is therefore the intent of the Legislature that, to the extent designated alerting authorities have difficulty acquiring or maintaining adequate alert and warning resources, those designated alerting authorities may consult with the Office of Emergency Services (OES) on best practices to achieve those goals.*

The Bill directs CalOES: *On or before July 1, 2019, the Office of Emergency Services, in consultation with, at minimum, telecommunications carriers, the California cable and broadband industry, radio and television broadcasters, the California State Association of Counties, the League of California Cities, the disability community, appropriate federal agencies, and the Standardized Emergency Management System Alert and Warning Specialist Committee, shall develop guidelines for alerting and warning the public of an emergency. Those guidelines shall include, at minimum, the following:*

- (1) Timelines for sending alerts during an emergency.
- (2) Practices for sending advance warnings of an impending threat.
- (3) Practices for testing, training on, and exercising a city's, county's, or city and county's alert and warning system.
- (4) Consideration for coordinating alerts with neighboring jurisdictions.

- (5) Guidelines and protocols for redundancy and utilizing multiple forms of alerts.
- (6) Guidelines and protocols for chain of command communications and accounting for staffing patterns to ensure a trained operator is always on call.
- (7) Practices for effective notifications to the access and functional needs population as defined in subdivision (b) of Section 8593.3.
- (8) Message templates.
- (9) Common terminology.

Another legislative effort concerns **Assembly Bill 1877** (Translation of alerts and warnings): *The Office of Emergency Services shall create a library of translated emergency notifications that may be used by designated alerting authorities when issuing emergency notifications. The office shall consider the two most commonly spoken languages other than English in the state when creating the library.*

(c) The Office of Emergency Services shall create a translation style guide that includes a glossary of translated standard abbreviations used in emergency notifications.

Designated alerting authorities shall consider using the library and translation style guide developed pursuant to subdivisions (b) and (c) when issuing emergency notifications to the public.

Designated alerting authorities may use a hyper-link to the translated emergency notification in a message disseminated through a wireless emergency alert for purposes of issuing a translated alert.

Six months after the Office of Emergency Services launches the library and translation style guides pursuant to subdivisions (b) and (c), the office may impose conditions upon a city's, county's, or city and county's application for any voluntary grant funds that have a nexus to emergency management performance that the office administers by requiring the designated

alerting authority within a city, county, or city and county to translate emergency notifications. Director Medigovich said that the timeline for implementing **SB Bill 833** means it will go into effect by “the summer of 2019.”

ENHANCING THE 911 SYSTEM

Senate Bill 870 relates to 911 services: (*Improvements to the State’s 911 system*): *The Disaster Response-Emergency Operations Account is hereby established in the Special Fund for Economic Uncertainties. Notwithstanding Section 13340, moneys in the account are continuously appropriated, subject to the limitations specified in subdivisions (b), (c), and (d), without regard to fiscal years, for allocation by the Director of Finance to state agencies for disaster response operation costs incurred by state agencies as a result of a proclamation by the Governor of a state of emergency, as defined in subdivision (b) of Section 8558. For the purposes of this section, disaster response operations costs are defined as those that are immediate and necessary to deal with an ongoing or emerging crisis. These allocations may be for activities that occur within 120 days after a proclamation of emergency by the Governor.*

Senate Bill 821 (Opt Out mandate for alerts and warnings):
This bill provides for local jurisdictions to get information to update their reverse 911 systems for greater warning accuracy.

It also paves the way for emergency warning systems that use wired and wireless communications to sign up residents so they automatically get warnings but can “opt out” if they so choose. Many systems in use today default to “Opt In” so a positive action on the part of a person at risk is required so they can receive emergency wireless warnings.

PUBLIC COMMENT AND SUGGESTIONS

During the public comment period I was able to inform the legislators that the California State

Emergency Alert System (EAS) Committee I serve on as Vice Chair is ready and willing to participate in discussions and meetings with CalOES with the goal to improve overall alert and warning effectiveness.

We can act as a single point of contact for implementing and coordinating warning improvements broadcast radio and TV as well as cable. We can also work with emergency managers when warning problems crop up for fact finding and implementing lessons learned. Our EAS committee believes that broadcasting not only has a role to work in concert with newer warning systems.

Broadcasting can provide “last ditch” capabilities when wildfires and other disasters take down the utility power and wireless infrastructures, and help emergency managers deliver non-warning but vital long form information as the stories of emergencies play out.

JUMPSTARTING IMPROVEMENTS

I also distributed a draft document outlining steps all communities can take right now to improve getting vital information to a population at risk:

REAL TIME BUILT-IN INSTRUMENTATION

Comprehensive Monitoring & Control

100% Remote Access

nautel.com/AUI

nautel
Learn more »

1. Make sure that your local government written emergency plans fully integrates alert and warning plans and procedures. The overall goal is to tell the unfolding story of the emergency. This can help a public at risk better understand what is happening from the start so they are better prepared to take immediate life saving actions like evacuation
2. Community risk assessment by local emergency managers should consider using all possible alert and warning tools, make sure they fit the needs of a public at risk and that they work as advertised by salesmen. Decades of warning research tell us that the public is more likely to take timely protective actions if they receive multiple warnings from different sources to reinforce the need for immediate action.
3. Social media and cell phone alerts are the current bright and shiny warning objects being marketed to government warning centers. Not all of them are suitable for all parts of the country or can keep promises salesmen sometimes make that they can reliably warn 100% of your public.
4. Pre-record messages based on local risk assessments that can be rapidly disseminated as the EPI effort ramps up. Use them during the event as reminders to be played as appropriate as the event unfolds.
5. Remind the public that for many emergencies the public will be on their own while/when local response resources are overwhelmed. Such periods can run from hours to weeks depending on the event.
6. Designate persons not directly involved in emergency response to help officials tell the story of the emergency to the public in real time using all your alert and warning tools with accurate information. Create an editor's desk function to process the information flow. Recruit and

vet candidates like retirees, amateur radio operators, podcasters, service club members, etc.
 7. Create an EPI "Hot Clock" to let the public know when to expect updates. Hot Clock = planned hourly segments when different aspects of the emergency are covered. Predictability = Reassurance.

8. Assure that all information going out to the public is coordinated before being released. Telling the public about water and food distribution points should wait until logistics are in place for distribution and safety/security.

9. Consider creating an EPI mutual aid plan when information gathering resources are scarce in the impacted area — plan and train for using people out of the impacted area using whatever voice, text and data links that are up and running. Have backup plans ready to go for this to work when you need it! Recognize that PIO support is a mutual aid resource.

10. Integrate EPI into tabletop and live training exercises and hold post training effectiveness evaluations. Make sure incident after action reports evaluate EPI.

11. Promote your EPI plan to the public in advance so they know what to expect.

12. Start teaching personal and family emergency pre-preparedness for evacuations and shelter in place orders to youth. Introducing the FEMA "Youth Prep" program into school systems can get the preparedness message back to parents and relatives.

- - -

Richard Rudman is the Vice Chair, California Emergency Alert System State Emergency Communications Committee (SECC) and a Core Member of the Broadcast Warning Working Group (BWWG). You can contact Richard at rar01@me.com

- - -

Would you like to see more articles like this one?

[Click here](#) for a quick (30 seconds) sign up form for the one-time-a-week BDR Newsletter.

[Return to The BDR Menu](#)