



## Meeting Minutes Nevada Earthquake Safety Council

<b>Attendance</b>	<b>DATE</b>	Thursday, August 5, 2015	
	<b>TIME</b>	9:00 A.M.	
	<b>LOCATION</b>	Nevada Division of Emergency Management Executive Conference Room 2478 Fairview Drive Carson City, NV 89701	
		Clark County Fire Department, Station 18 2 <sup>nd</sup> Floor Conference Room 575 E. Flamingo Road Las Vegas, NV 89119	
	<b>METHOD</b>	Videoconference	
<b>RECORDER</b>	Janell Woodward		
<b>Council Members</b>	<b>Present</b>	<b>Staff and Others</b>	<b>Present</b>
Alan Bennett	X	Janell Woodward (DEM)	X
Michael Blakely	X	Rick Martin (DEM)	X
Ian Buckle	X	Henna Rasul (DAG)	X
Wayne Carlson	X	Karen Johnson (DEM)	X
Craig dePolo	X	Connor Long (DEM)	X
Jim Faulds	X		
Jeff Hahn	X		
Graham Kent	X		
Ron Lynn	X		
Connie Morton			
Jim O'Donnell	X		
Vance Payne	X		
Jim Reagan	X		
Woody Savage	X		
Wanda Taylor	X		
Jim Walker			
Jim Werle			

### 1. CALL TO ORDER AND ROLL CALL

Chair, Ron Lynn called the meeting to order. Janell Woodward called roll and a quorum was established.

### 2. PUBLIC COMMENT.

Chair, Ron Lynn opened discussion for public commentary for this meeting. There were no comments.

### **3. INTRODUCTION OF NEW NEVADA DIVISION OF EMERGENCY MANAGEMENT (NDEM) CHIEF, CALEB CAGE.**

Chair, Ron Lynn introduced Caleb Cage, the new Chief of the Division of Emergency Management. The NESC is an advisory board to the Chief. Chief Cage introduced himself to the Council indicating this was the beginning of week 5 for him in his new position and he is looking forward to working with the Council.

### **4. APPROVAL OF THE MEETING MINUTES.**

Chair, Ron Lynn asked for a motion to accept the meeting minutes from both the May 28, 2015, quarterly meeting. Jim Reagan made a motion to approve the minutes from the May 28, 2015 meeting. Woody Savage seconded the motion. All were in favor of approving the minutes from May 28, 2015 and the motion passed unanimously.

### **5. REPORT ON NEPAL EARTHQUAKE AND DAMAGE SUSTAINED.**

UNR graduate student, Ian Pierce, provided a report on his experience traveling to Nepal after the magnitude 7.8, intensity 9 earthquake on April 25 outside Katmandu. Mr. Pierce provided some historical and geographical information regarding Nepal and the surrounding areas. While his group was in Nepal, there was a 7.3 earthquake in addition to a 6.7 and 6.2 prior to their arrival. This earthquake resulted in more than 9,000 fatalities and more than 23,000 injuries. Put into perspective, Katmandu has a population of approximately 1 million people with the valley having about 3 million. Nepal's population is approximately 26.5 million. Economic impact was approximately \$7 billion with primary economic drivers being tourism and remittance. Tourism has been largely affected as many people are afraid to enter the country with damaged tourism sites.

Going into Nepal, most buildings were standing after the earthquake even though they were mostly either unreinforced masonry or lightly reinforced. Buildings are basically built in cubes and built up with multistory buildings. Fires were not a problem as most everyone utilizes propane for cooking. Nepal does not have very strong building codes and the codes they do have are not enforced. The gentle shaking of this earthquake was demonstrated in one building by wine bottles that were left standing after the earthquake. This is compared to the Napa earthquake where wine bottles were strewn everywhere.

Of note, the Drop, Cover and Hold On response that is taught in the West, is not generally a good idea in Nepal where a building might come down on your head. In one village, 1,200 of the 1,400 buildings were destroyed as compared to Katmandu where most buildings were left standing. Out of 2000 residents, 71 were killed in this village. Rick Martin asked about medical care. Mr. Pierce stated that UNICEF was in the area. However, in the outer villages, there were some doctors in the areas but no official medical facility was set up. Residents are used to this situation as they live in the mountains and are very resilient.

While the team thought they would find surface rupture, what they found was a fairly significant landslide. The people in the village were afraid the landslide would dam up their water supply as this has happened in the past. Landslides can also cut off roadway access.

Of note, the government told the people there would not be any further aftershocks which of course was not true and led to distrust of the government. There did not seem to be a lot of coordinated emergency response.

A paper is in publication at this time, and pictures and a blog are at the following website: <https://neotectonics.wordpress.com/2015/05/17/barpak-epicenter/>.

## **6. UPDATE FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA).**

Juliette Hayes once again updated the committee regarding the status of the open earthquake program manager position with FEMA. Kelly Stone left the position and went back to Region X. Michael Hornick is once again covering that position as well as his own and is the point of contact for Nevada's earthquake program. FEMA plans to expand the earthquake program to include a risk focus. The Federal government hiring process is a very long process.

## **7. NEVADA DIVISION OF EMERGENCY MANAGEMENT (NDEM) UPDATE.**

Rick Martin provided an overview update from the Division of Emergency Management.

With regard to PT&E, Vigilant Guard 17 will take place in November 2016 and will be an earthquake scenario. NDEM is working with the Federal government to hold a CyberStorm exercise. As well, a recovery tabletop exercise will be held in the near future including several different states. This will be a flooding event. The division is engaging currently in drought and school emergency planning. Rick would like to suggest to Chief Cage that more resources be put toward earthquake planning as well. Homeland Security funding was approved toward recovery planning to be carried out through Washoe County Emergency Management but will be statewide. Outreach will go far and wide. FEMA conducted damage assessment classes in Carson City and in Las Vegas. They would like to schedule this as well in Elko and do a second round in Carson City. These were very good courses.

NDEM held a 2-hour exercise to test our in-house processes and controls consisting of a 6.3 earthquake in downtown Las Vegas. Clark County Emergency Management provided great participation.

EMPG 15 is now in and awards are in the process of going out to all the jurisdictions. For NESC, the same amount will be provided. FY14 supplemental funds were used to fund a project recommended by NESC.

The pre-disaster mitigation (PDM) application process has closed and five applications were received. These were all flood projects as well as a planning project to update Clark County's Hazard Mitigation Plan. Included with Clark County's project is about \$100,000 to complete the unreinforced masonry (URM) survey project in Clark County.

There have been a number of flood events recently and NDEM did damage assessment for these events. Douglas County was impacted the most and NDEM continues to work with them to see what additional assistance can be provided.

The National Earthquake Program Manager's Conference will be held in Long Beach, CA this coming year in May 2016. Rick stated we might be able to take some additional people this next year.

We are working with the Western States Seismic Policy Council (WSSPC) on several projects. Craig has been working on the earthquake incident commander handbook and provided an update.

We are also working on earthquake billboards in the south as well as some flashcards for additional NEHRP projects this year.

City of Reno is conducting a URM study as well as Lincoln County and Carson City.

Wayne Carlson added that they just recently contracted with the School Safety Solutions on school emergency plans to go out and develop emergency plans for the remaining 13 of the 15 rural schools. They will be doing on-site assessments and training for new Federal guidelines on school emergency plans. Wayne wondered if this would tie into the NETAP training that was discussed. Janell will discuss this with Wayne.

## **8. RECENT SEISMICITY IN NEVADA AND REPORT FROM THE SEISMOLOGICAL LABORATORY, UNIVERSITY OF NEVADA, RENO.**

Vice Chair, Graham Kent provided an update on recent seismicity in Nevada and the UNR Seismological Laboratory. About 2/3 of the state is not covered by seismometers. The all-hazards approach is very important for this reason.

There have been 104 events magnitude 3.0 or greater so far this year. This number is very similar to what you see for northern and southern California. Two largest earthquakes were in the last two weeks in the Sheldon area of Northwest Washoe County. This swarm had calmed down over the spring and has now picked back up again. A magnitude 7 earthquake in this area would affect not only small surrounding communities but also communities in California and Oregon.

We are on a pace to hit 19,000 earthquakes this year which is down just a bit from the 18,000 mentioned two months ago.

The Seismological Laboratory is working on building out the broadband capabilities in the state which allows the use of moment tensor solutions. This allows a faster response in getting accurate information out after an event. As well, this all works toward an early warning system in Nevada.

The all-hazards camera program may prove to save money change how fires are fought in the west through early detection. Rick Martin asked who monitors the cameras. The Bureau of Land Management (BLM) monitors the cameras and the Seismological Laboratory monitors them as well. There will be a trend toward fire use with these cameras. The Alert Tahoe website is available for public to see live views as well as time-lapse views. Cameras may be viewed at <http://alerttahoe.seismo.unr.edu/>.

## **9. REPORT ON THE NATIONAL EARTHQUAKE HAZARD REDUCTION PROGRAM (NEHRP).**

Chair, Ron Lynn reported that after reviewing the budget for NEHRP, there is no real money out there. In working on their report for the government, one of the key items recommended by Ron was more money for this program. The report is almost complete. The building grading program was moved from FEMA to the NEHRP program. As an all-hazard program, this takes a look at all current building stock and rates the building.

## **10. UPDATE FROM THE WESTERN STATES SEISMIC POLICY COUNCIL (WSSPC).**

Chair, Ron Lynn provided an update from the Western States Seismic Policy Council. Craig dePolo reported there have not been any recent Basin and Range committee meetings. The Engineering, Construction and Building Codes Committee had two meetings since the last full meeting. They are working on policies with key policies including building code. A couple of other codes for schools and they are mindful of financial impact to schools.

In Clark County, they are building 12 new schools and replacing two others so building has resumed in Clark County. Safety of children is of utmost importance as well as the use of schools in emergency situations.

#### **11. NESC AND UTAH SEISMIC SAFETY COMMISSION (USSC) JOINT MEETING, NOVEMBER 10.**

The joint meeting on November 10 with the Utah Safety Seismic Commission will be held at UNR. Details are near complete and information will be forthcoming. Utah will be reaching out to FEMA Region VIII to see if someone will be able to attend the meeting. Chair, Ron Lynn thanked Dr. Ian Buckle and Dr. Craig dePolo for working with Janell regarding this meeting. Jeff Lusk and Michael Hornick plan to attend the meeting.

#### **12. ANNOUNCEMENT OF REMAINING 2015 MEETING DATE**

The next meeting will be in November and will be the joint meeting between NESC and USSC with also attendance by Idaho and possibly Colorado. Meeting location is as follows:

University of Nevada, Reno  
Harry Reid Engineering Laboratory, Rooms 109/110  
1664 N. Virginia St.  
Reno, NV 89503

#### **13. COUNCIL MEMBER COMMENTS.**

Craig dePolo indicated there will be a public tour to the 1915 earthquake ruptures commemorating the 100<sup>th</sup> anniversary of that earthquake. This will begin in Winnemucca at about 10 am with a short overview and history of the earthquake. They will then carpool down to the rupture and have lunch at the rupture and walk the rupture area.

Craig also asked about the Centennial brochure and Rick Martin indicated we have those brochures and they are using them with outreach. Craig asked to get some to give out at the Centennial event and Rick provided those. Vance Payne asked how soon the flash cards would be available as perhaps the historical and new information could be brought together in outreach. Flashcards will not be available until after the new Federal fiscal year begins in October.

The week of October 6-7, Jim Faulds stated the Nevada Bureau of Mines and Geology will have their second annual Discover Nevada open house. There will be talks on several topics including earthquakes. This will be at the Great Basin Science Samples and Records Laboratory.

Great Shakeout is on October 15.

Chair, Ron Lynn stated the billboards were well received in Northern Nevada and Southern Nevada will be having a round of earthquake billboards. The billboards will be on the next agenda after the joint meeting in February.

Ron also indicated that he will be speaking with Chief Caleb Cage regarding NESC and legislative activities with at least a presentation to the Legislature. This was supposed to happen this past legislative session but it never came to fruition.

#### **14. PUBLIC COMMENT**

Chair, Ron Lynn opened the meeting for public comment. Dr. Annie Kell from the Seismological Laboratory encouraged everyone to sign up their organization for the Great Shakeout.

Next week, they will have the Big Shaker which is a mobile earthquake shaker truck which will be on the UNR campus near the quad as well as an elementary school and finally the Discovery Museum.

#### **15. ADJOURN**

Chair, Ron Lynn declared the meeting adjourned.