

**Minutes of the
Nevada Hazard Mitigation Planning Committee
15 November 2012**

The Nevada Hazard Mitigation Planning Committee (NHMPC) met from 8:46 a.m. until 12:37 p.m., on Wednesday, November 15, 2012 at the Office of Emergency Management, City of Henderson, 240 Water Street, Henderson, Nevada.

Attendees included:

Elizabeth Ashby, Nevada Division of Emergency Management
Ed Atwell*, University of Nevada Emergency Management
Joe Curtis*, Storey County Emergency Management
Craig dePolo*, Nevada Bureau of Mines and Geology
Rick Diebold*, City of Las Vegas, Office of Emergency Management
Mike Dondero*, Nevada Division of Forestry
Rob Fellows*, Carson City Public Works
Martha Henson, Nevada Bureau of Mines and Geology
Al Johnson, City of Henderson, Department of Utility Services
Ron Lynn*, Department of Development Services, Clark County Building Department
Kim Davis*, Division of Water Resources
Rosemarie Reynolds, Attorney General's Office
Chris Smith, Nevada Division of Emergency Management
Dimitri Theodorou, Clark County School District Emergency Management
Ryan Turner*, Henderson Emergency Management
Jim Walker*, Nevada Department of Transportation

* indicates a member of the Board of Directors.

Members unable to attend:

Terri Garside, Member of the Public
Andrew Trelease*, Clark County Regional Flood Control District
Jim Reagan*, NV Energy Emergency Management

WELCOME AND INTRODUCTIONS

Craig dePolo opened and chaired the meeting which began with attendees introducing themselves. Craig gave a brief explanation on why continuing in-person meetings are important versus going to teleconferencing. Committee meetings being held in our communities informs and motivates those communities to do hazard mitigation planning and activities. We see firsthand projects that we have evaluated and their value in making Nevada safer from natural hazards. The Douglas County meeting in August 2012 is an example of in-person presentations being important as they were swayed to develop more comprehensive earthquake mitigation plans and Craig is helping Douglas County work on these.

A quorum of the members of the Board of Directors was present.

PUBLIC COMMENTS

No comments.

APPROVAL OF MINUTES FROM AUGUST 9, 2012

Ron Lynn made motion to approve the minutes, Rick seconded that motion, no discussion. The minutes of the August 9, 2012 meeting of the committee were unanimously approved.

Minutes of the committee are posted on the NHMPC Web site at www.nbmj.unr.edu/nhmpc/nhmpc.htm.

CITY OF HENDERSON ON THE DEMOGRAPHICS, GOVERNMENT, ECONOMIC, SOCIAL PROFILE AND FUTURE DEVELOPMENT (discussion only)

Presented by Ryan Turner
Emergency Manager City of Henderson

Demographics for the City of Henderson on the 2010 census showed the population was 257,000. In 2012, Ryan estimated that approximately 270k people are living in Henderson. The population had a 47% growth from 2000-2010, and is the 2nd most heavily populated city in the State. Forbes ranked Henderson the 2nd safest city in America in 2010. Money Magazine ranked Henderson the 66th best place to live in America in 2012.

The City of Henderson has a city manager form of government, with four council members, a city manager, and mayor. Henderson has master planned communities, Sun City Anthem, approximately 14,000 homes, Sun City McDonald Ranch, 7,500 homes, and the Green Valley Ranch area has about 18,000 homes.

Future development in Henderson includes the Tuscany Project between Black Mountain industrial complex and Lake Las Vegas, which currently has 884 houses built, but the project are under contract to build 3,100. There is also the Las Vegas National Sports Complex that will be built. Union Village Medical Complex, a \$2.5B project of combining three hospitals into one. The Inspirada future home development, has a couple thousand homes already built, and is on contract to build 13,000, but Henderson does not anticipate that level. Ryan estimates ~8,000 more homes will be built. A major mail distribution center, FedEx, is building a large distribution center next to the Henderson airport.

The Office of Emergency Management started in the early 1980s. We had several significant events, there was the PEPCON explosion, May 4, 1988 claimed two lives, injured 372 people, caused over \$100M in damage, and it was the largest disaster in the state's history.

Another event was the Pioneer Chlor Alkali Company, Inc. chlorine gas leak, May 6, 1991, 200 people hospitalized, 700 people sheltered, and 2,000-7,000 evacuated to other areas of the community. Olin Chlor Alkali Products (formerly Pioneer) is the largest chlorine manufacturer on the west coast. In 1991 there were no housing developments around the plant. If there was an incident today Ryan feels that 10s to 100s of thousands of people would be affected.

On July 8, 1999 Henderson had a 100-year storm, and has had four floods in the last couple of years in which the incident management team was activated, along with the recent floods of this year, 2012.

Emergency Management of Henderson participates in a variety of task forces, including but not limited to the Southern Nevada Incident Management Unified Command Type III Interagency IMT which can respond to all types of hazards. Metropolitan Medical Response System (MMRS), Nevada Task Force

One, Nevada Emergency Management Coordinating Council (EMCC), Urban Area Security Initiative (UASI).

The four objectives for moving Emergency Management of Henderson forward are:

1. The Council will provide a multidisciplinary forum address current and emerging emergency management issues, so they have formed the Emergency Management Council for the City of Henderson and have representation from all departments.
2. To review and assess status of citywide all hazards including but not limited to mitigation, preparedness response through EMC of Henderson and also through the Clark County Hazardous Mitigation Plan, etc.
3. Provide strategic policy and advice to the Emergency Manager of the city management, the Diverse Management Council.
4. And to implement the provisions of the EMC charter.

The first project EMC is working on is the Nevada statewide co-op project. Each department is working on their continuity of operation plans.

The Council is preparing an Emergency Preparedness Action Matrix, taking lessons learned from exercises and having all the exercises on the matrix so you know what you need to address to keep moving forward.

The Council is structured by the emergency support function in the emergency operation plan, not necessarily by the division the person on the Council works for.

The Council recently revised their all hazard emergency management plan. Highest hazards facing Henderson are aircraft incidents as the McCarran Airport traffic pattern goes over Henderson. Civil disturbances are considered moderate risk. Earthquakes are a high risk, and the Council recently sent in an application to go to IEMC exercise for earthquake preparedness.

Extreme heat is a high risk. Flash flooding is listed as a moderate risk, although recently it was a high risk, so that is something they need to modify.

A hazmat event is considered a high risk because everything that leaves BMI complex is hazardous, whereas landslides the Council feels is a low risk. The threat of large venue fires is a moderate risk because of codes that are in place, and radiological/nuclear incidents are considered low risk.

Over the next couple years the Council wants the City of Henderson accredited under the Emergency Management Accreditation program, and have created a three and five year strategic plan. They want to continue to build relationships with the City, Region, and State, and assist when needed. The Emergency Management Accreditation Program (EMAP) has 60 standards to meet. Accreditation proves you have met certain standards, and have to maintain those standards, which will help with future funding. Reaccreditation is every 5 years.

Kim asked the question about how EMC of Henderson is involved with building codes in the community development process. Ryan answered that by being involved certain types of establishments will not be put next to a chemical plant, such as a school was not put next door to a chemical plant recently. He is also working to make sure that when people buy a home in a certain development the buyer will receive a disclosure statement saying that chemical plant is in the neighborhood.

Ron answered that the land use codes were rather lax when the county was in control of the BMI. Henderson was building into the impact areas, and being a sovereign city, there was no oversight from the county, and it is tough for the incorporated cities, monetary wise, to exclude property from development.

E. Earthquake Hazard in Henderson presentation (discussion only)

Presented by Craig dePolo, Research Geologist UNR

There are several truths, one being that any community that is not earthquake prepared, the citizens of that community finds that fact unacceptable, especially since there are ways to prepare to reduce loss of life or property from an earthquake.

Nevada is the third most earthquake hazardous state in the United States. Twenty three earthquakes have been equal or greater than 6 magnitude. Western Nevada is subject to strike/slip motion similar to California which may affect Henderson as well.

Craig showed maps of earthquake faults, earthquake maps, and geodetic deformation and noted that we have lost the folklore of earthquakes being common in Nevada with a 30-year hiatus in large earthquakes and new people moving in who have not experienced earthquakes while living in Nevada.

Reservoir-induced earthquakes began a little over a year after the initial filling of Lake Mead in 1935. Earthquake activity has been much lower since reservoir levels stabilized in about 1966 according to a 1993 U.S. Bureau of Reclamation report. Craig noted that if Lake Mead is filled quickly again it could cause more reservoir-induced earthquakes with magnitudes as large as 5.0.

The Black Hills fault is the fastest moving fault for Henderson, and has the most potential for earthquakes.

Considering the chance of an earthquake occurring within 50 years and 31 miles (50 km) of Henderson, Craig presented estimated probabilities of 50 to 60% for a magnitude 5 or greater, ~30% for a M 5.5 or greater, 12% for a M 6 or greater, 4 to 5% for a M6.5 or greater, and <0.5% for a M7 or greater earthquake. Potential earthquake losses are reported in Nevada Bureau of Mines and Geology Open-File Report 09-8, "Estimated Losses from Earthquakes near Nevada Communities." Loss projections are only considered to be accurate to within an order-of-magnitude because of the tremendous uncertainties and unknowns associated with damaging earthquakes. HAZUS results for an estimated magnitude 6 earthquake near Henderson give total economic losses of \$2.5 billion.

The "My Plan" web application was introduced along with the earthquake risk associated with unreinforced masonry buildings. In a preliminary estimate, Henderson has 335 potential unreinforced masonry buildings, 206 that are residential and 129 that are commercial or public buildings.

A discussion about what is included in the HAZUS program. HAZUS modeling can be done for the California area and how it would affect Henderson/Las Vegas. Other than the local area information, estimates of areas outside the local area are included. Rick Diebold said there is information on the 1987 California earthquake and how many evacuees came to the Las Vegas/Henderson area as an example. Hector-Minor quake caused damage in Henderson. Elizabeth said she can request information from her California counterpart. Rick Diebold would like to see affects upon areas in California such as the Colton Fuel Farm. Nevada gets 80-90% of its fuel from there. What happens if the Cal-Neva Pipeline is affected, or food supplies as we get a lot of our food from California.

F. Flood hazard in City of Henderson presentation (discussion only)

Presented by Albert Jankowiak,
City of Henderson

Recent floods that occurred in August and September of 2012 were shown and discussed, including video footage of the flood events and rain gauge measurements. These thunderstorms were not typical monsoonal events and developed just outside the basin, and in one case sweeping across the basin close to the peak runoff and exacerbating that runoff .

G. Planning Subcommittee Report (Discussion/Possible Action)

Presented by Jim Walker
Planning Subcommittee Chair

Subcommittee meetings are usually the last Monday of the first month of each quarter. The last meeting was last month on the 29th and they did not have a quorum, so could not conclude any business. However there were things we still needed to discuss, which included the Hazard Mitigation Plan Update which Elizabeth addressed. The Committee members received the profiles for the low-risk hazards by email. The Subcommittee would like the Committee to look at the goals and objectives for the current plan to make sure there is nothing missing. They should include the HAZUS runs for earthquake, and for flood for the major rivers of Nevada. Hopefully it will also include wildfire areas, and then along with the demographic information then they only have two more meetings with this particular committee to approve the final plan. July is the deadline for approval by the committee, with October being the final date for submission.

The low-risk hazard profiles were reviewed and the comments from interested persons were incorporated. Craig dePolo called for a vote on the low-risk profiles and all were approved.

The next items to review were the 2010 state goals and action items. Kim Davis asked for clarification on justification on action items. Elizabeth answered that old action items need to be validated as to why they should stay on the list.

Elizabeth mentioned that the NHMPC traveling statewide fulfills one of FEMA's requirements for the State's Enhanced Hazard Mitigation plan. The requirement reads that the state demonstrate a commitment to a comprehensive hazard mitigation program through a) funding the required 25 percent match for hazard mitigation program funding, or b) Developing, adopting and enforcing building codes, or c) support local mitigation by developing councils, executive actions, partnerships to promote hazard mitigation. Nevada cannot meet this requirement with option b). Option a) may be implemented when the economy is better. Option c) is the only way Nevada can meet the requirement at this time.

H. Nevada Earthquake Safety Council Activity Report (Discussion Only)

Presented by Ron Lynn
Chair of the Nevada Earthquake Safety Council

Craig dePolo mentioned that there was no Nevada Earthquake Safety Council meeting, however, Ron Lynn reported that the Shake Out had a participation of 500,000 people statewide which was a tremendous number of participants, and included every school district in the state.

I. State Silver Jackets Team Activity Report (Discussion Only)

Presented by Kim Davis
Nevada Division of Water Resources
U.S. Corps of Engineers and federal agencies flood mitigation program

The Team is a multi-agency team of federal and state agencies to collaborate and address the flood risks in the State of Nevada. There is a team in all 50 states as Nevada has a Silver Jackets Charter now. The

Silver Jack pilot project received \$100k funding from the Army Corps of Engineers, and are seeking additional funding from other federal agencies, to expand and add functionality to an existing flood history website, for the Carson River watershed and build a similar website for the Walker River watershed. Having videos from *youtube* helped in a meeting in Pahrump to explain to residents why new flood maps were needed and their risk to flooding. The Team members signed the charter on November 8, 2012 in a ceremony that took place at the Governor's Office in Carson City.

J. Report on the status of open pre-disaster mitigation and hazard mitigation grant program allocated Nevada grants (Discussion Only)

Presented by Elizabeth Ashby
Nevada Division of Emergency Management

This is a quarterly report on grants. The Waterfall Fire group is finalizing their fiscal reporting. FEMA officially closed it as of June 2012. The money for the Fernley Canal Breach dam watch has not been awarded yet. It is still in the environmental review and will probably be another year before the money is awarded. The Sky Tavern Enhancement of Water Supply is ongoing. The Clark County Hazard Mitigation Plan grant had just been approved. North Tahoe Fire Protection District needs to have the environmental assessment done so that FEMA will award the money. City of Reno Wildlands Fuels Reduction project is done with the environmental assessment. The 395 Culvert Project has not been approved yet. The Truckee River Flood project is almost done; they only have the landscaping portion to do. The Lincoln County Plan was updated. White Pine County and Eureka County are both doing a regional plan. The Nye County Plan update needs more work. The Storey County Six Mile Canyon is in environmental review. That project may be withdrawn. The "My Plan" Website for risk assessment is almost done. There is a \$75k grant to look for mitigation activities, for flood mitigation. The communities will need to submit plans to obtain funding. The City of Caliente Spring Heights project is in environmental review and FEMA is requesting a full environmental assessment. It will probably take another year, to a year and a half before funds are released. Pershing, Lander, Humboldt Counties are working on the hazard mitigation plan. Marlin Channel in Washoe County is a long way off. State Hazard Mitigation plan received the money which NBMG is working on. FEMA sent a list to State Public Works Board of requirements for the environmental assessment. Nevada Living with Fire program received money to enhance outreach.

2013 Unified Hazard Mitigation Grant Cycle application ranking (Discussion/For Possible Action)

Presented by Craig dePolo, Chair

The committee members ranked each county. Clark County was ranked #1, Douglas County and Elko County came in at a tie for #2.

Ron Motioned to move Elko to second place, Ryan second the motion. There were five members in favor so it was still a tie. There was a discussion that the loss of the road had in Douglas County. Ed motioned to move Douglas to second place, Rob second the motion, there were seven members in favor, 3 members opposed, so Douglas was ranked #2, and Elko #3.

Update on Action Items from discussion of 5-year strategic plan for NHMPC Review and possible approval of the orientation for new members reference package

Presented by Elizabeth Ashby

The Action Item was the Orientation of new members. Task Force will sit with new members to go over new member task force packet. Ron Lynn moved to approve, Jim Walker seconded the move, no

discussion, all approved.

Announcement of Future Meetings

February 12, 2013 (Lander or Humboldt)
May 7, 2013 (Tonopah, NV)
August 13, 2013 (Reno, NV)
November 12, 2013 (Mesquite, NV)

Public Comments

There were no public comments.

Ron Lynn talked about the National Building Institute of Building Science has reactivated the safety council.

Kim Davis reported that the minutes from the last meeting listed Andrew Trelease's first name as Alex. The item of approval of minutes from the last meeting was re-opened, Jim Walker motioned that the minutes be approved with the correction, and Rob Fellows second the motion. The minutes were approved.

Going back to the Announcement of Future Meetings, Ed Atwell indicated that the day before the November 11, 2013 meeting is a holiday, and want to know if there will be any provisions for getting there the day before. Elizabeth will take that into consideration. Joe Curtis announced that he will be on vacation.

Jim Walker brought up the subject of the bylaws that the elected chair term is for one year and the vice chair is for 1 year. When chair's one year is up, the vice-chair moves into chair position. These items will be addressed at next meeting.

Mike Dondero is retiring from his state position. The board presented him with the traditional engraved rock.

The meeting adjourned at 12:37 p.m.

Respectfully submitted by Martha Henson, November 12, 2012.