



Holding My Breath . . .

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Jay Aldean Named Director of TRFMA

The acting chief of the Truckee River flood project was given the job on a permanent basis. Jay Aldean was unanimously selected as executive director of the Truckee River Flood Management Authority by its board of directors on October 14th.

I recently attended a presentation by U.S. Bureau of Reclamation experts on the forecast for what we could expect from the 2012 water year in Northern Nevada. NOAA's winter outlook calls for a La Niña year, generally predicting warmer, drier conditions in the southern U.S. and cooler, wetter conditions in the north. Much of Nevada, however, falls in the area between the two extremes and the BOR speaker admitted that it is difficult to predict for Nevada what the impact would be, on our water supply or on our flood forecast, of a La Niña or an El Niño year. In other words, anything could happen.

Likewise, it seems that anything could happen with the NFIP Reform bills currently under consideration by the U.S. Congress. I had hoped that I might have some definitive news to report on the NFIP reauthorization by this writing, however Congress chose instead to pass another

continuing resolution that extends NFIP authorization until November 18, 2011.

In July, the House passed H.R. 1309, the "Flood Insurance Reform Act of 2011" by a mar-



NOAA U.S. Winter Outlook—Temperature, December 2011—February 2012

gin of 406-22. In September, the Senate Committee on



NOAA U.S. Winter Outlook—Precipitation, December 2011—February 2012

Banking and Urban Affairs passed its version of a reauthorization bill.

Both measures would reauthorize the program for 5 years through 2016. Also both measures intend to move the

program toward sounder financial operations that require that premiums be raised to levels actuaries say reflect the true risk of flooding. Otherwise the two measures differ on various points including phasing in of the mandatory-purchase requirement for flood insurance in newly mapped flood zones and whether or not to forgive the NFIP's nearly \$18 billion debt that resulted from the catastrophic losses of the 2005 hurricane season, which included hurricanes Rita and Katrina.

Like predicting the weather, I would not venture to predict what our U.S. Congress will do with the NFIP reauthorization, particularly in light of the much larger economic challenges that we are facing these days. What does seem clear is that the next few months will bring changes to the NFIP—perhaps not substantial or perhaps dramatic change. I cannot tell. So as we enter our winter flood season up here in Northern Nevada, I am holding my breath to see what happens.

*Kim Davis, PE, CFM
Nevada Floodplain Manager*

Preferred Risk Policy Extension—What FEMA Wants Local Floodplain Managers to Know

Flood Maps Change— Flood Risks Change

In 2003, with aging flood control infrastructure and outdated flood maps across the United States, upon a request from the President, Congress appropriated funds directing FEMA to update the nation's flood hazard maps. This effort (known as Flood Map Modernization) used the latest data and technology to identify communities' current flood risks nationwide. As a result, many property owners have found that their risk of flooding has changed. For some, it was reduced; but for others, it increased. If a building in a moderate-to-low risk flood zone was newly mapped into a high-risk Special Flood Hazard Area (SFHA) and was secured with a federally regulated or insured loan, lenders may require flood insurance. While the property owner may have been able to buy a lower-cost Preferred Risk Policy (PRP) before the new flood maps became effective, any policy purchased after the map revision would have to be rated at more expensive standard-rates. The PRP would have to be converted to more expensive standard-rated premiums at subsequent renewals. Recognizing the financial burden this places on affected property owners and that updating flood maps is continuing with FEMA's new Risk MAP (Mapping, Assessment and Planning) effort, FEMA is

extending the eligibility of writing the lower-cost PRP for two years after a revised flood map's effective date.

Eligibility for the PRP Two-Year Extension

For policies effective on or after January 1, 2011, FEMA is applying the two-year PRP eligibility extension for buildings affected by map changes since October 1, 2008.

Affected Buildings

Previous to January 1, 2011

Buildings that have been newly mapped into high-risk flood zones (i.e., labeled with "A" or "V" on the flood maps) due to a map revision on or after October 1, 2008, and before January 1, 2011, are eligible for a PRP for *two policy years* effective between January 1, 2011, and December 31, 2012. So, policies issued as standard-rated policies or converted to standard-rated policies following a map change on or after October 1, 2008, could be converted to the lower-cost PRP for two years beginning on the first renewal effective on or after January 1, 2011. Buildings meeting these same conditions that were not previously insured may be issued as a new

business PRP on or after January 1, 2011, during this same eligibility period.

Buildings that are newly mapped into a high-risk flood zone due to a map revision on or after January 1, 2011, are eligible for a lower-cost PRP

for *two policy years* from the map revision date. Buildings meeting the above requirements must also meet the NFIP's PRP loss history requirements. At the end of the extended eligibility pe-

riod, policies on these buildings must be written as standard-rated policies; however, there are additional rating options available, which could result in additional savings (e.g., grandfathering, elevation rating, higher deductible).

Stay Protected and Save

Whether a building is mapped into a high-risk or moderate-to-low risk flood zone, the property owner should always consider flood insurance as a way to reduce their overall risk. While this new rating option provides temporary financial relief, the property owners need to understand that they are still at a high risk for flooding.

This extension provides af-

Significant Savings

A property owner who has a home without a basement will pay \$343 for \$200,000 in building and \$80,000 in contents coverage for a PRP versus more than \$1,400 for a standard-rated policy in an X zone, and even more if rated in a high-risk flood zone (i.e., A zone)...a savings of more than \$1,000+ a year.

While this new rating option provides temporary financial relief, the property owners need to understand that they are still at high risk for flooding.



Nevada NFIP Policy Data by Flood Zone

There were a total of 14,434 active flood insurance policies in Nevada at the end of September 2011, according to FEMA’s NFIP policy database. Of those, 13,863 could be categorized by flood zone and the distribution of flood policies and average annual policy premium, by type of FEMA mapped flood zone and according to the age of the structure, is shown in the table below.

The Pre-/Post-FIRM date is different for each NFIP-participating community and corresponds to the effective date of the first Flood Insurance Rate Map (FIRM) for the community. For most Nevada communities, the Pre-/Post-FIRM date occurred sometime during the 1980s.

Overall, higher policy premiums are paid for older, Pre-FIRM structures versus newer, Post-FIRM structures. The zone type with the highest number of policies was Zone AO which typically corresponds with alluvial fan areas.

	Pre-FIRM		Post-FIRM	
	No. Policies	Ave. Premium	No. Policies	Ave. Premium
AE Zone	918	\$1,443	1,142	\$677
A Zone	429	\$1,243	1,592	\$573
AO Zone	559	\$720	4,003	\$442
AH Zone	186	\$1,067	277	\$591
D Zone	4	\$891	5	\$1,028
Standard X Zone	244	\$1,276	349	\$1,268
Preferred X Zone	984	\$362	3,144	\$358

Policy data for Zone X is divided into Standard X Zone and Preferred X Zone (Preferred Risk Policy or PRP). The relatively high average annual premium for Standard X Zone policies in Nevada is possibly due to PRP policies that have converted to Standard X policies. Because PRP policies are written for a set combination of building and contents coverage, if a PRP policy converts to a Standard X Zone policy for the same amount of building and contents coverage, the annual policy premium can be significantly higher. Policy holders in such situations may not be aware of the option to drop the contents portion of coverage since the mandatory-purchase requirement for flood insurance, that applies to properties located in Special Flood Hazard Areas, does not require maintenance of contents coverage.

The extension provides affected property owners additional time to save and prepare for paying for the full risk premium in two years.

PRP Extension (continued)

affected property owners additional time to save and prepare for paying for the full risk premium in two years. The two-year extension also provides more time for the communities to upgrade or mitigate flood control structures to meet FEMA standards and reduce the flood risk. Sound floodplain management will reduce the financial impact on residents and businesses in the long term while making their community safer to live and work in.

What To Do

The new PRP eligibility extension became effective on January 1, 2011, and insurance companies have been contacting policyholders – those who may potentially qualify for this extension – at least ninety days before their policy expires. Consequently, some policyholders received notification as early as October 1, 2010. Insurance agents are required to provide their insurance company documentation to show that the building is eligi-

ble for the PRP extension, including the current and prior map information. Such information, both historic and current flood maps, can be found on FEMA’s mapping website (<http://msc.fema.gov>) or through the local community’s floodplain administrator. Property owners in communities that have received flood map updates since October 1, 2008 and have questions should contact their agent for further details. Additional information can also be found at www.FloodSmart.gov.

Conditional Letter of Map Revision (CLOMR)

What is a CLOMR?

A Conditional Letter of Map Revision (CLOMR) is FEMA's comment on a proposed project that would affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway, the effective Base (1-percent-annual-chance) Flood Elevations (BFEs) or the Special Flood Hazard Area (SFHA). The letter does not revise an effective Flood Insurance Rate Map (FIRM); it indicates

whether the project, if built as proposed, would be recognized by FEMA.

When is a CLOMR Required?

NFIP regulations require a CLOMR to be obtained from FEMA before a project can be built in two situations. The first situation is for a project on a stream or river that has been studied using detailed hydrologic and hydraulic analyses and for which BFEs have been specified, but a regulatory floodway has not been designated. If the community proposes to allow development that would result in more than a 1.0-foot increase in the BFE, a CLOMR must first be obtained from FEMA.

The second situation requiring a CLOMR is for a project on a stream or river for which detailed analyses have been conducted and both BFEs and a regulatory floodway have been designated. If the community proposes to allow development

totally or partially within the regulatory floodway that would result in any (greater than 0.0 foot) increase in the BFE, a CLOMR must be obtained.

Although the two situations described above are the only ones where the NFIP regulations require a CLOMR, FEMA will review and comment and, if appropriate, issue a CLOMR for any proposed project when requested by an NFIP participating community. All requests for CLOMRs must be supported by detailed flood hazard analyses prepared by a qualified Registered Professional Engineer. The specific data and documentation requirements are contained in Part 65 of the NFIP regulations and in the FEMA MT-2 application forms package. To defray costs to NFIP policyholders, FEMA charges fees to recover review costs.

Can a Building Permit be Issued Based on a CLOMR?

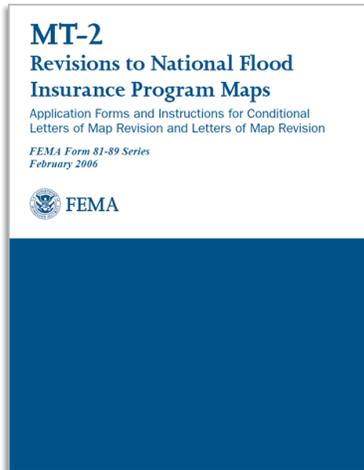
A CLOMR is issued based on a hydrologic and hydraulic analysis of the flood control or drainage modification aspects of a project, not on building design. For a large project that includes flood control or drainage modifications that change BFEs or SFHA, in addition to construction of buildings, the CLOMR would be submitted on the flood control/drainage phase of the project. Construction of the flood control/drainage phase of the project can proceed under the CLOMR, however building permits cannot be issued based on a CLOMR, because a CLOMR

does not change the FIRM. Upon completion of the flood control/drainage modifications, the LOMR can be issued. If the building design relies on modification of BFEs or removal from SFHA to be compliant with floodplain management building requirements, the final LOMR must be approved before building permits for structures can be considered or issued.

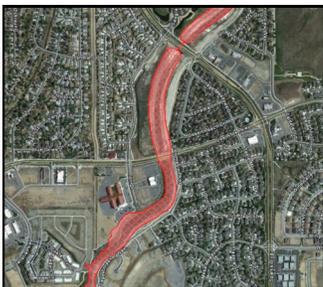
Is a LOMR required after a CLOMR?

A CLOMR is issued based on proposed plans, however the FIRMs are not changed based on proposed projects. An approved CLOMR informs the builder and others (such as the bank financing the project) that, when the project is completed, it will qualify for a LOMR. An approved LOMR will still be required to officially change the FIRM.

It is important to note that until such time as the FIRM is modified by an approved LOMR, the mandatory purchase requirement for flood insurance applies in areas still within SFHA. Additionally, if a building permit is issued prior to completion of a flood control project, the building must meet building requirements based on the effective FIRM or the community risks permitting a violation. Cynthia McKenzie, FEMA Region IX reports, "We've seen instances where subdivision developers have received CLOMRs, began house construction, never completed the flood control project, and the homeowners were left with houses built 3 feet below the BFE and huge insurance policies."



... building permits cannot be issued based on a CLOMR because a CLOMR does not change the FIRM.

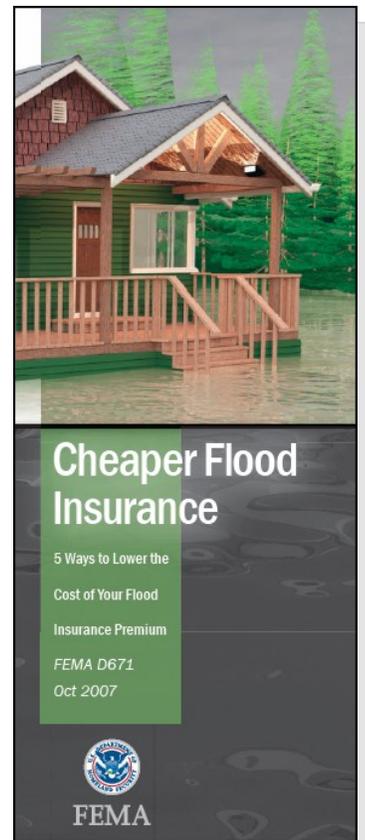


Subdivision development adjacent to Special Flood Hazard Area

5 Ways to Lower the Cost of Flood Insurance Premiums

In addition to maintaining community compliance with the program, enforcement of basic NFIP floodplain management building requirements can ultimately save money in flood insurance premium for owners of properties located in Special Flood Hazard Areas. FEMA Brochure D671 lists five activities that can affect flood insurance premiums:

1. **Utilities**—If you locate any machinery or equipment that services a building (i.e., electrical, heating, ventilation, plumbing, and air conditioning equipment) below the base flood elevation, an additional surcharge will be added to your insurance premium causing your annual insurance rates to increase. For more information on relocating utilities, see FEMA publication 259, *Engineering Principles and Practices of Retrofitting Floodprone Residential Structures*.
2. **Flood Openings**—One common reason why insurance policies are rated so severely is due to a lack of proper flood openings. Minimum building code requirements for “foundation vents” in areas outside the floodplain do not typically meet the same specifications as “flood openings” or “flood vents” within a floodplain. For buildings in the floodplain, there must be at least two openings with 1 sq inch of opening per sq ft of enclosed area, and the bottom of those openings can be no higher than 1ft above the exterior finished grade. There are no discounts for “partial credit.” If you have 1000 sq feet of enclosed crawlspace and 900 sq inches of openings, you will be charged as though there are no openings (i.e., basement loading fees could apply). Don’t forget that garage doors, windows, and doors do not count as flood openings unless they have openings installed within them. For more information on flood openings, see FEMA Technical Bulletin 1, *Openings in Foundation Walls and Walls of Enclosures*.
3. **Basements**—Unless explicitly authorized, basements in new buildings constructed in the floodplain are prohibited. FEMA considers “crawlspaces” that are sub-grade on all sides to be basements as well. If your community has adopted building standards that allows such construction, homeowners in the floodplain with an excavated, sub-grade crawlspace will bear an additional financial burden through a 15-20% increase on their flood insurance premiums. When building, you can save that cost by backfilling any excavated areas within the foundation. It can also be done at a later date by using pea-gravel or other suitable material to raise the interior crawlspace floor elevation to the same height or higher than the exterior finished grade. For more information on basements, see FEMA Technical Bulletin 11-01, *Crawlspace Construction for Buildings Located in Special Flood Hazard Areas*.
4. **Elevation**—Elevating above the base flood elevation is the fastest way to reduce the cost of your annual flood insurance premium. You can save hundreds of dollars for every foot the elevated floor is located above your community’s established base flood elevation. Elevating just one foot above the base flood elevation often results in a 30% reduction in annual premiums. For more information on elevation, see FEMA publication P-312, Second Edition, *Homeowner’s Guide to Retrofitting*.
5. **Relocation**—One of the most effective options is relocating your home on an area of your property that has its natural grade above the base flood elevation. This method may be costly, but can reduce or eliminate the need to pay flood insurance entirely. If you are preparing to build a new home or structure, evaluate your property to determine if there is a suitable building area outside of the floodplain. Be warned; homes constructed outside the floodplain (or on natural ground above the base flood elevation) are not 100% safe from flooding. On average, between 20-25% of all flood insurance claim payouts go to buildings that are located outside of the special flood hazard area. If your home is located outside the floodplain and you still want to be covered, affordable “Preferred Risk” policies are available. For more information on relocation, see FEMA publication P-312, Second Edition, *Homeowner’s Guide to Retrofitting*.



Floodproofing

What is floodproofing?

Floodproofing is a combination of adjustments and/or additions of features to individual buildings that are designed to eliminate or reduce the potential for flood damage. Some

examples of floodproofing include the placement of walls or levees around individual buildings; elevation of buildings on fill, posts, piers, walls, or pilings; anchorage of buildings to resist flotation and lateral

movement; watertight closures for doors and windows; reinforcement of walls to resist water pressure and floating debris; use of paints, membranes, and other sealants to reduce seepage of water; installation of pumps to control water levels; installation of check valves to prevent entrance of floodwaters at utility and sewer wall penetrations; and location of electrical equipment and circuits above expected flood levels.

The term “dry floodproofing” is also used by FEMA to refer to specific subset of floodproofing methods. A dry floodproofed structure is made watertight below the level that needs flood protection to prevent floodwaters from entering. Making the structure

watertight requires sealing the walls with waterproof coatings, impermeable membranes, or a supplemental layer of masonry or concrete. Dry floodproofing a structure includes the following:

- Using waterproof membranes or other sealants to prevent water from entering the structure through the walls,
- Installing watertight shields over windows and doors,

- Installing measures to prevent sewer backup.

Floodproofing techniques can be classified on the basis of the type of protection that is provided:

- Permanent measures—always in-place requiring no action if flooding occurs
- Contingent measures—requiring installation prior to the occurrence of a flood
- Emergency measures—improvised at the site when flooding occurs

Does FEMA allow floodproofing in lieu of elevation?

The NFIP allows floodproofing of a new or substantially improved **non-residential building** in an A Zone (Zone A, AE, A1-30, AR, AO or AH)

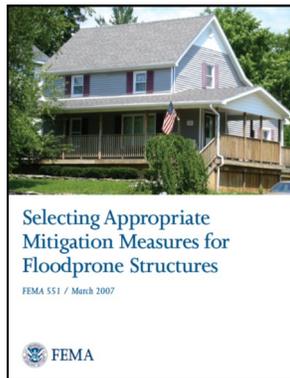
to Base Flood elevation (BFE) or higher allowing for a lowest floor below the BFE. FEMA does not allow floodproofing of **residential buildings** in lieu of elevation. Additionally, FEMA only allows floodproofing measures which are incorporated in the design of the building for the purpose of regulating new construction and substantial improvement.

Clearly, where floodproofing methods are employed, permanent measures are preferred over contingent measures.

Floodproofing techniques that require human intervention are allowed by FEMA but should be discouraged. Human intervention means that a person has to take some action before the floodwater arrives, such as turn a valve, close an opening or switch on a pump. There are many potential causes for failure for these techniques, including inadequate warning time, no person on duty when the warning is issued, the responsible person can't find the right parts or tools, the person is too excited or too weak to install things correctly, and/or the electricity fails.

What are the flood insurance implications for floodproofing?

For community compliance, the minimum NFIP requirement for floodproofing a building is to the Base Flood Elevation (BFE). However when the building is rated for flood insurance, one foot is subtracted from the floodproofed elevation. Therefore,



... FEMA does not allow floodproofing of residential buildings in lieu of elevation.



a building has to be floodproofed to one foot above the BFE to receive the same favorable insurance rates as a building elevated to the BFE. The bottom line is, always floodproof to at least one foot above the BFE, or Base Flood Depth for Zone AO or AH.

Floodproofing components for an individual building may also include floodwalls, small localized levees, or berms around buildings. While providing flood protection for the building, it should be noted that such components, because they are not part of the building itself, are generally not credited for flood insurance rating of a building under the NFIP.

What additional paperwork is required?

A registered professional engineer or architect must prepare the building plans and certify the floodproofing measures, preferably using the FEMA Floodproofing Certificate form (FEMA 81-65). Maintenance of the Floodproofing Certificate is part of the NFIP-participating community’s responsibility for maintaining certification records under 44 CFR 60.3(b)(5) (iii) and 60.3(c)(4).

Floodproofing Resources

FEMA Technical Bulletin 3-93, Non-Residential Floodproofing—Requirements and Certification , April 1993

FEMA P-551, Selecting Appropriate Mitigation Measures for Floodprone Structures, March 2007

FEMA P-383, Edition 1, Protecting Building Utilities From Flood Damage, November 1999

ASCE 24-05, Flood Resistant Design and Construction, December 2010

FEMA Mitigation Best Practices Portfolio, website link:
<http://www.fema.gov/plan/prevent/bestpractices/index.shtm#3>

U.S. Army Corps of Engineers, National Nonstructural/Flood Proofing Committee, website link:
<http://www.nwo.usace.army.mil/nfpc/>

What about mitigation of an existing property?

Where existing, residential and non-residential buildings are in harms way within Special Flood Hazard Areas, FEMA encourages mitigation to reduce flood damages. Through it’s Unified Hazard Mitigation Assistance (UHMA) grant programs, FEMA can provide funds to eligible communities to address flood hazards.

Among eligible activities identified in UHMA guidance, dry floodproofing of Historic Residential Structures and Non-residential Structures are specifically listed. In the case of Historic Residential Structures, a dry floodproofing project is permissible only when other techniques that would mitigate to the BFE would cause the structure to lose its status as a Historic Structure.

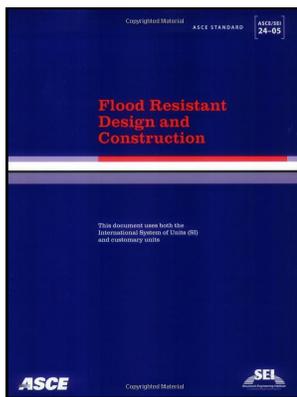
Project applicants are advised, however, that community floodplain management ordi-

nance requirements apply to all such projects as well as the flood insurance implications described earlier.

What resources are available for conducting a floodproofing

A listing of floodproofing resources are shown above. FEMA Technical Bulletin 3-93, Non-Residential Floodproofing—Requirements and Certification, describes the NFIP requirements that must be met for any kind of non-residential floodproofing project located in Special Flood Hazard Area.

Additionally, the U.S. Army Corps of Engineers maintains a National Nonstructural Floodproofing Committee (NFPC) that has directed several floodproofing demonstrations and tests. An extensive list of floodproofing publications is available through the USACE website listed above. Additionally the NFPC will be holding its National Floodproofing Conference this November in Sacramento—the first time this conference will have been held west of the Mississippi River.



... always floodproof to at least one foot above the BFE, or Base Flood Depth for Zone AO and AH.



The Traveling NHMPC

“What’s a NIM-PIC?”

Or more accurately, “What is the NHMPC?” NHMPC stands for Nevada Hazard Mitigation Planning Committee. It is a 13-member committee comprised of representatives from across Nevada who advise the Nevada Division of Emergency Management on natural hazard mitigation planning, activities, and policies. One of the primary activities of the committee is to review and prioritize applications each year for FEMA Hazard Mitigation Assistance grants which fund local mitigation planning and project activities.

Because of the multi-hazard nature of its mission, NHMPC representation includes expertise on a variety of natural hazards, including seismic, wild-fire, and flood hazards. Additionally, NHMPC committee members represent rural and urban agencies; research, emergency response and regulatory agencies; State, regional, county, and city agencies as

well as the private sector.

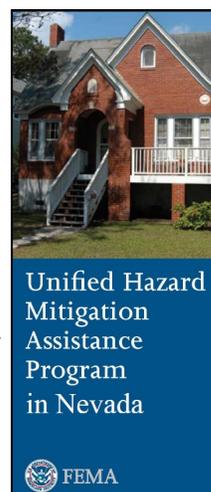
Beginning in 2010 the NHMPC began a concerted effort to bring its quarterly meetings, along with its message encouraging local hazard mitigation planning, to communities around the State. NHMPC meetings have been held in Las Vegas, Carson City, Reno, Fallon, Caliente, Lovelock, Pahrump, Yerington, Elko, and Virginia City.

The ability of NHMPC to bring its meetings to local communities around the State has been advantageous for both the hosting communities as well as the NHMPC. The hosting community benefits from an understanding of Hazard Mitigation Assistance planning and project resources available to them. Additionally, the ability of the NHMPC to travel around the State is a primary reason that the Nevada State Hazard Mitigation Plan earned its status with FEMA as an “Enhanced Plan.” This status provides for

a higher level of FEMA post-disaster mitigation funds available to Nevada communities, as well as additional consideration by FEMA for Hazard Mitigation Assistance grant applications submitted from Nevada.

The NHMPC itself benefits enormously from a better understanding of local hazards and mitigation efforts from first-hand accounts by local community officials—including presentations by community floodplain managers. Some committee members from the more urbanized parts of Nevada have commented that it is an education in and of itself to travel, for the first time, to some of the more rural and remote parts of our great State.

Future NHMPC meetings are planned for Eureka, Henderson, Minden and the Mesquite/Overton area. For more information about the NHMPC, go to www.nbmng.unr.edu/nhmmpc/nhmmpc.htm.



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2012 Nevada Hazard Mitigation Grant Assistance Applications

Applicant	Hazard	Total Cost	Fed Share	Description
Clark County School District	Seismic	\$668,000	\$501,000	Gas Valve Replacement for Schools
Clark County School District	Seismic	\$844,378	\$633,284	Las Vegas Academy Seismic Bracing
Douglas County	Planning	\$136,344	\$102,258	Hazard Mitigation Plan Update
Douglas County	Flood	\$2,077,000	\$1,557,750	State Route 88 Culvert Enhancement
State Public Works Board	Flood	\$2,480,265	\$1,860,199	Caliente Youth Center Stream Crossing
Nevada Division of Emergency Management	Planning	\$553,000	\$414,750	State Hazard Mitigation Plan Update

Nevada Flood Hazard Mapping Forecast

Elko County DFIRM

FEMA will collaborate with Elko County and the Cities of Elko, Wells, Carlin, and West Wendover, to resolve issues from a 2009 FEMA county-wide flood hazard mapping restudy. West Wendover disputed preliminary Base Flood Elevations (BFEs) and floodplain boundaries along various flooding sources. Because BFEs were disputed, FEMA will review the appeal in accordance with the provisions of Title 44, Chapter I, Part 67, Code of Federal Regulations. FEMA's mapping contractor, Baker AECOM, is tasked with

addressing these issues and producing Elko County's first Digital Flood Insurance Rate Map (DFIRM). The September 2009 Elko County preliminary DFIRM can be viewed at www.hdrprojects.com/FolsomFEMAProject/mapping.htm#nevada.

Risk MAP in Nevada

FEMA will be starting watershed-based Risk MAP activities in Nevada. Risk MAP will transform FEMA's traditional flood identification and mapping efforts into a more integrated process of accurately identifying, assessing, communicating, planning and mitigat-

ing flood risk, according to FEMA Procedure Memorandum No. 59 (July 23, 2010).

The first step in the Risk MAP process is called Discovery and is mandatory for all new and updated flood risk projects.

Appendix I of FEMA's *Guidelines and Specifications for Flood Hazard Mapping Partners* provides new

guidance that requires more stakeholder involvement. Two areas being considered for first implementation of Risk MAP Discovery in Nevada are Las Vegas Wash and the Carson River watershed.



Carson City	Vicee, Ash & Kings Canyon PMR	PMR to incorporate final LOMR for an approved CLOMR; during the interim, mandatory flood insurance purchase requirement applies
Clark County	Las Vegas Wash PMR	Restudies at Gowan and Rancho, Las Vegas Wash through Desert Rose Golf course, and Muddy River near the Bowman Reservoir Diversion
Eureka County	County Wide DFIRM	H&H analyses were not updated for this map release, however highly detailed LiDAR topography was used to re-delineate flood zones
Lander County	County Wide DFIRM	Lander County is pursuing a U.S. Army Corps of Engineers project to upgrade and obtain certification for a levee at Battle Mountain
Lyon County	Walker River PMR	Mapping products will include Risk Map depth grids; study will determine BFEs behind "levee-like structure" in the City of Yerington.
Lyon County	Phase One - Carson River Watershed Study	CWSD is leading this study through a CTP agreement with FEMA; first Risk Map type study for Region IX
Mineral County	County Wide DFIRM	Mineral County is working toward certification of a "levee-like structure" at Hawthorne
Washoe County	Evans Creek & white Lake PMR	Detailed studies and BFEs developed in areas of anticipated future development within City of Reno.
White Pine County	County Wide DFIRM	No new detailed study for this map release; last restudy was in 1987

PMR—Physical Map Revision; LOMR—Letter of Map Revision; - CLOMR—Conditional Letter of Map Revision; LiDAR—Light Detection And Ranging; CWSD—Carson Water Subconservancy District; CTP—Cooperating Technical Partners



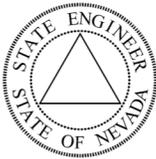
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NEVADA FLOODPLAIN MANAGEMENT NEWS

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Nevada Floodplain Management News is a publication of the Nevada Floodplain Management Program.

The Nevada Floodplain Management Program was established in the Department of Conservation and Natural Resources, Division of Water Planning by the 1997 Nevada State Legislature after the need for a statewide flood management program became apparent when damages from the 1997 New Years Flood on the Truckee River were assessed.

In the Spring of 2001 the Nevada Floodplain Management Program was transferred within the Department of Conservation and Natural Resources and was later confirmed by Governor's Executive Order, dated April 10, 2003, to its current residence within the Division of Water Resources under the direction of the Nevada State Engineer.

Do Your Flood Hazard Maps Need Work?

The Nevada Floodplain Management Program would like to know where you think your community Flood Insurance Rate Maps need improvement. If you know of areas where the following apply:



- Major change in gage record since effective analysis that includes a major flood event,
- Updated and effective peak discharges that differ significantly,
- Model methodology no longer appropriate based on current FEMA *Guidelines and Specifications for Flood Hazard Mapping Partners*,
- Addition or removal of a major flood control structure (dam, levee, etc.),
- Current channel reconfiguration outside of the Special Flood Hazard Area,
- New or removed hydraulic structures that impact Base Flood Elevations (more than 5),
- Significant channel fill or scour,

please give us your recommendations for better Nevada Flood Insurance Rate Maps, by contacting Luke Opperman, Flood Hazard Mapping Coordinator at (775) 684-2826, lopperman@water.nv.gov.