



NEVADA

Flood Management News

Spring 2006

Nevada Division of Water Resources

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NEVADA FLOODPLAIN MANAGEMENT PROGRAM

Thanks for the Memories . . .

As we roll into the Spring of 2006, we are in transition here in the Nevada Floodplain Management Program. I have recently taken on new responsibilities at the Division of Water Resources, and consequently I'll no longer be serving as the State Floodplain Manager for Nevada. The Division is working to fill the position and since I will not be leaving the Division, I anticipate that the transition for the new State Floodplain Manager will be a smooth one. In the mean time, I have been covering basic program responsibilities, such as publishing this issue of the Flood Management News.

This issue of the newsletter includes important information on the new Elevation Certificate recently revised by FEMA. This issue also contains useful information for community officials on flood zone determinations, lateral and vertical additions to structures, flood insurance, and National Weather Service's California Nevada River Forecast Center.

In the next issue of Flood Management News the Division will introduce the new Nevada Floodplain Manager. As this is my farewell issue, I'd like to say that I've truly enjoyed working in floodplain management for Nevada. I feel especially fortunate to have had the opportunity to meet so many people and to see so much of the great State of Nevada as part of my work. I hope you have a safe Spring and best wishes for wise floodplain management in the coming year (and beyond).

*Kim Groenewold, Staff I Engineer
Floodplain Management Program*

Changes to FEMA's Elevation Certificate

The *Elevation Certificate* (FEMA Form 81-31) is an important administrative tool of the National Flood Insurance Program. It is used to determine the proper flood insurance premium rate; it can be used to document elevation information necessary to ensure compliance with community floodplain management regulations; and it may be used to support a request for a Letter of Map Amendment (LOMA) or Letter of Map Revision based on fill (LOMR-F).

A new version of the Elevation Certificate became available on February 28, 2006, and FEMA is allowing for a *transitional period*, ending December 31, 2006, for surveyors, engineers and architects to begin using the new forms. In the interim, if the new Elevation Certificate form is used, then ALL of the required information should be included as though it is being completed after January 1, 2007. If using the OLD form, only the information required on the OLD Form would have to be completed. Use of the new form is required beginning January 1, 2007.

The new version of the Elevation Certificate may be found on-line at www.fema.gov/nfip/elvinst.shtm. A summary of changes was provided to ASFPM members by Rod Renkenberger and Bruce A. Bender who served on FEMA's Elevation Certificate Revision Task Force on behalf of Association of State Floodplain Managers (ASFPM). The ASFPM summary reads as follows:

Besides a general reformatting of the elevation certificate, the following are specific changes made. The new requirements that take effect *January 1, 2007* are in bold.

Section A—Property Owner Information

- Requires the Latitude / Longitude; this used to be optional,
- Requires a minimum of two photographs of the building, if the certificate is being used to obtain Flood Insurance (these can be taken by the surveyor or anyone else),
- The following opening requirement information was formerly located in Section "C" and was moved to Section "A" since that made more sense:
 - For Buildings with a crawl space or enclosure(s), provide:
 - Square footage of crawl space enclosure(s) (NEW)**,
 - Number of permanent flood openings in the crawl space or enclosure(s) walls within 1.0 foot above adjacent grad,
 - Total net area of flood openings in enclosure area,
 - NEW—for a building with an attached garage, provide:**
 - Square footage of attached garage,**
 - Number of permanent flood openings in the attached garage walls within 1.0 foot above adjacent grade,**
 - Total net area of flood openings in garage enclosure area.**

Section D—Surveyor, Engineer or Architect Certification

- Created a single section for Certification.

Section E –0 Building Elevation Information (survey not required) for Zone AO and Zone A (without BFE)

- Added a line in reference to buildings with an attached garage where the top of slab is required.

Although the new Elevation Certificate indicates that photographs are required only if the certificate will be used to obtain flood insurance, there are a few good reasons to recommend that photographs be included with a new Elevation Certificate in all cases:

1. Elevation Certificates are used for more than just obtaining flood insurance. The photographs can be very useful to local communities for confirming compliance with elevation and flood venting requirements;
2. When buying a home or refinancing a mortgage, a home owner may find he needs to provide an Elevation Certificate to his mortgage lender or insurance company. The first place he would look for one is with his local building department since many communities keep Elevation Certificates on file as part of their required documentation for demonstrating compliance with their floodplain management ordinance. If the homeowner can obtain a properly completed Elevation Certificate from his community's building department, with photographs included, he is saved the cost of hiring a surveyor to produce another Elevation Certificate for his property.
3. Although the ASFPM summary states that photographs may be taken by the surveyor or anyone else, the Elevation Certificate instructions indicate that the *photographs must be taken within 90 days from the date of certification*. Because the surveyor, engineer or architect completing the Elevation Certificate places his seal on the form, it is to his advantage to provide the photographs at the time he completes the form avoiding any potential for misrepresentation on the Elevation Certificate by attachment of photographs at a later date.

FEMA has published Floodplain Management Bulletin FEMA 467-1, entitled *Elevation Certificate* that answers many of the most frequently asked questions concerning the proper completion and use of the form. The current version of FEMA 467-1 was published in May 2004 and consequently does not address new aspects of the latest version of the Elevation Certificate. It is nevertheless a useful supplement to the instructions that accompany the Elevation Certificate form and may be found on-line at www.fema.gov/pdf/fima/fema467-6-10-04.pdf.

FEMA Approves Hazard Mitigation Plans for More Nevada Communities

As of February 2006, the following Nevada communities have FEMA approved hazard mitigation plans:

State of Nevada	Carson City
City of Reno	Lincoln County
Washoe County	Nye County
California-Nevada Washoe Tribe	City of Sparks

A FEMA approved hazard mitigation plan is a fundamental eligibility requirement for communities seeking mitigation project grant funding from FEMA.



Are Local Officials Liable for Making Flood Zone Determinations?

Fannie Mae/Freddie Mac flood insurance guidelines require *lenders* to determine whether a structure is in a Special Flood Hazard Area (SFHA). The key distinction for government officials is between providing information and making a determination that a property is in or out of a SFHA. If a Standard Flood Hazard Determination Form, FEMA form 81-93, is completed, the local official could be liable for inaccuracies or misrepresentations. The local official's only obligation is to have flood hazard information available and accessible to the public, including the determination companies.

Local officials who assist property owners in determining flood zone status should make it clear that the determination is for informational purposes only. The property owner's lender must still have an official determination done on an approved form. The flood zone determination companies are being paid to use their expertise to make this determination and to guarantee that it is accurate and these companies cannot expect local officials to make the determination. This is not the local official's responsibility; it is the lender's, under federal law.

Communities currently participating in the Community Rating System (CRS) may wish to take note of the requirements of Activity 320—Map Information. This CRS activity is designed to reward communities for informing a requester of a property's flood zone status, not to determine whether flood insurance is required. This activity does not create any liability for government officials.



NFDA Awards Its Certification to Ten Flood Zone Determination Companies

The National Flood Determination Association (NFDA) completed its certification process for the first group of applicants for certification program for Flood Zone Determination Companies. Following a rigorous examination, ten companies have been certified as meeting NFDA's stringent standards on seven key criteria: accuracy, business recovery capabilities, industry experience, financial viability, training of map research analysts, quality assurance, and recordkeeping. Peer and independent auditor reviews validated each applicant company in these areas.

The NFDA is a national nonprofit organization comprised of flood determination companies, their vendors, resellers and other industry associates. The NFDA is dedicated to promoting the interests and success of members involved in the making, distributing and reselling of flood zone determinations. NFDA's web site may be found at www.floodassoc.com.

2005 NFDA Certificate Recipients

Access Information Systems, Inc.
 American Flood Research, Inc.
 Charles Jones, LLC
 First American Flood Data Services
 LandSafe Flood
 LSI Flood Services
 Midwest Flood Zones, LLC
 Nationwide Real Estate Tax Service, Inc.
 Nationwide TotalFlood Services, Inc.
 TransUnion Settlement Solutions, Inc.



15th Anniversary of CRS

The Community Rating System (CRS) has reached it's 15th year of lowering flood insurance premiums through local mitigation, outreach and educational activities beyond the minimum NFIP requirements. To find out more, check out the FEMA web site www.fema.gov/nfip/crs.shtm

FEMA Fact Sheet Explains Repairs, Remodeling, Additions, and Retrofitting

In anticipation of the massive rebuilding effort in the post-Katrina Gulf Coast Region, FEMA published a series of 31 Technical Fact Sheets that explain various aspects of National Flood Insurance Program regulations. These fact sheets comprise the *Home Builder's Guide to Coastal Construction*, FEMA 499, August 2005. While the main intent of the fact sheets is to address coastal construction requirements, several are also enlightening for those of us in land-locked, desert states.



Home Builder's Guide to Coastal Construction

Technical Fact Sheet Series
FEMA 499 / August 2005



Technical Fact Sheet No. 30 entitled *Repairs, Remodeling, Additions, and Retrofitting* has been particularly helpful in clarifying NFIP guidelines concerning additions to structures located in Special Flood Hazard Areas. Technical Fact Sheet No. 30 explains that if a **lateral addition** constitutes a **substantial improvement** to an "A-zone" building (this includes buildings in zones A, AE, AO, AH or A1-A30), only the addition must comply with the current

floor elevation, foundation, and other flood requirements for new construction *as long as the alterations to the existing building are the minimum necessary to tie the addition to the building*. Minimum alterations necessary means the existing building is not altered, except for cutting an entrance through the existing building wall into the addition. If more extensive alterations are made to the existing building, such as removal of the connecting wall or connection through more than a single entryway, the entire structure must be brought into compliance with the requirements for new construction.

If a **vertical addition** to building in a Special Flood Hazard Area constitutes a **substantial improvement**, both the addition and the existing building must comply with the current floor elevation, foundation, and other requirements for new construction.

Substantial improvement is any reconstruction, rehabilitation, addition, or improvement of a building, the cost of which equals or exceeds 50 percent of the building's pre-improvement market value. All structural items and major building components, interior finish elements, utility and service equipment, and labor and materials are included in the substantial improvement determination. Design costs, clean-up, contents, and outside improvements are *not* included in the substantial improvement determination.

The complete coastal construction fact sheet series is available on the FEMA web site at www.fema.gov/fima/mat/fema499.shtm. While many of the fact sheets provide information specific to coastal flood hazard areas, also referred to as "V-zones," several address topics common to both "V-zones" and to "A-zones" which include Zones A, AE, AO, AH and A1-A30.

Coastal Construction Fact Sheet Series

- FS No. 1—Coastal Building Successes and Failures*
- FS No. 2—Summary of Coastal Construction Requirements and Recommendations*
- FS No. 3—Using a Flood Insurance Rate Map (FIRM)*
- FS No. 4—Lowest Floor Elevation*
- FS No. 5—V-Zone Design and Construction Certification*
- FS No. 6—How Do Siting and Design Decisions Affect the Owner's Costs?*
- FS No. 7—Selecting a Lot and Siting the Building*
- FS No. 8—Coastal Building Materials*
- FS No. 9—Moisture Barrier Systems*
- FS No. 10—Load Paths*
- FS No. 11—Foundations in Coastal Areas*
- FS No. 12—Pile Installation*
- FS No. 13—Wood-Pile-to-Beam Connections*
- FS No. 14—Reinforced Masonry Pier Construction*
- FS No. 15—Foundation Walls*
- FS No. 16—Masonry Details*
- FS No. 17—Use of Connectors and Brackets*
- FS No. 18—Roof Sheathing Installation*
- FS No. 19—Roof Underlayment for Asphalt Shingle Roofs*
- FS No. 20—Asphalt Shingle Roofing for High-Wind Regions*
- FS No. 21—Tile Roofing for High-Wind Areas*
- FS No. 22—Window and Door Installation*
- FS No. 23—Housewrap*
- FS No. 24—Roof-to-Wall and Deck-to-Wall Flashing*
- FS No. 25—Siding Installation and Connectors*
- FS No. 26—Shutter Alternatives*
- FS No. 27—Enclosures and Breakaway Walls*
- FS No. 28—Decks, Pools, and Accessory Structures*
- FS No. 29—Protecting Utilities*
- FS No. 30—Repairs, Remodeling, Additions, and Retrofitting*
- FS No. 31—References*

Flood Insurance Rate Change May 2006



Flood insurance premiums are going up! Rate changes for both new and renewal business with effective dates on or after **May 1, 2006**, will increase the overall rate level by just over 4%. This consists of flood insurance premium increases of 2.6% for policies on Post-FIRM structures, and 6.2% for Pre-FIRM policies.

The largest increases, percentage wise, will be for Pre-FIRM properties in V (coastal) and AE zones as well as A99, AR, and X zones (note: there are no V, A99 or AR zones in Nevada). Unnumbered A zones will also see a modest increase. Properties in shallow flooding zones (e.g. AO, AH) and those that qualify for a Preferred Risk Policy will see no

change in premium. Preferred Risk flood insurance policies are available to 1- to 4-family, residential structures located in a B, C, or X zone.

A Pre-FIRM structure is a building for which construction or substantial improvement occurred before January 1, 1975, or before the effective date of the first Flood Insurance Rate Map (FIRM) for a community, whichever is later. A Post-FIRM structure is defined to be a building for which construction or substantial improvement occurred after December 31, 1974, or on or after the effective date of a first Flood Insurance Rate Map, whichever is later.

National Weather Service California Nevada River Forecast Center Web Site



The California Nevada River Forecast Center (CNRFC) of the National Weather Service makes real-time stream flow and flood forecasting information available for selected rivers in California and Nevada. The CNRFC web site can be accessed on-line at www.cnrfc.noaa.gov. For Nevada, CNRFC web pages are available for stream flow gages on the West Walker, Carson, Truckee and Humboldt Rivers. The CNRFC web site provides a convenient method to monitor hydrologic and weather conditions as flood conditions are occurring.

The National weather Service provides weather, hydrologic, and climate forecasts and warnings for the United States, its territories, adjacent waters and

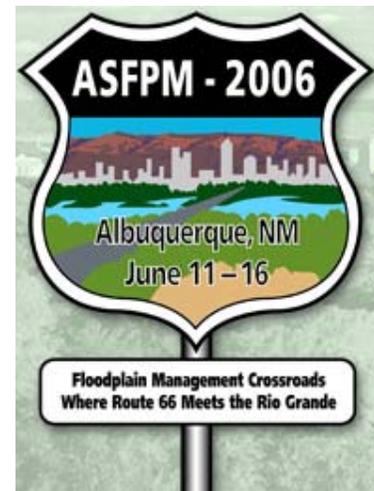
ocean areas, for protection of life and property and the enhancement of the national economy.

Natural Hazard Mitigation Saves

“Every dollar spent on mitigation saves \$4 in future damages and costs for the nation,” so says an independent study on hazard mitigation by the Multihazard Mitigation Council of the National Institute of Building Sciences. The study, concluded:

- Mitigation is sufficiently cost-effective to warrant federal funding on an ongoing basis both before disasters and during post-disaster recovery,
- Mitigation is most effective when it is carried out on a comprehensive, community-wide, long-term basis,
- Continuing analysis of the effectiveness of mitigation activities is essential for building resilient communities.

View the report, entitled *Natural Hazard Mitigation Saves*, on the Association of State Floodplain Managers website www.floods.org.



ASFPM 30TH ANNUAL CONFERENCE

Floodplain Management Crossroads Where Route 66 Meets the Rio Grande

FREE Publications Available Through the Nevada Floodplain Management Program

To obtain a copy of any of the publications listed below, send your request to:

Mary Thorson
Nevada Division of Water Resources
901 South Stewart Street, Suite 2002
Carson City, Nevada 89701-5250
mthorson@water.nv.gov

All publications are free (some only while supply lasts).



- **Above the Flood: Elevating Your Floodprone House**, FEMA 347, May 2000
- **Addressing your Community' Flood Problems, A Guide For Elected Officials**, Association of State Floodplain Managers and Federal Interagency Floodplain Management Task Force, 1996
- **Adoption of Flood Insurance Rate Maps by Participating Communities**, FEMA 495, September 2005
- **Alluvial Fans: Hazards and Management**, FEMA-165, May 1989
- **Answers to Questions About the National Flood Insurance Program**, FEMA
- **Appeals, Revisions, and Amendments to National Flood Insurance Program Maps, A Guide For Community Officials**, FIA-12, December 1993
- **Bringing the Plan to Life, Implementing the Hazard Mitigation Plan, State and Local Mitigation Planning How-To Guide**, FEMA 386-4, August 2003
- **Building a Disaster Resistant Community**, Project Impact, FEMA
- **Design Guidelines for Flood Damage Reduction**, FEMA 15, December 1981
- **Developing the Mitigation Plan, Identifying Mitigation Actions and Implementation Strategies, State and Local Mitigation Planning How-To Guide**, FEMA 386-3, April 2003
- **Elevated Residential Structures**, FEMA 54, March 1984
- **Floodproofing Non-Residential Structures**, FEMA 102, May 1986
- **Getting Started, Building Support for Mitigation Planning, State and Local Mitigation Planning How-To Guide**, FEMA 386-1, September 2002
- **Guidance on Estimating Substantial Damage Using the NFIP Residential Substantial Damage Estimator, Guidance: Software and Manual Computation Worksheet, Software Version 1.1**, FEMA 311, December 1998
- **Guidelines for Determining Flood Hazards on Alluvial Fans**, FEMA, February 23, 2000
- **Homeowner's Guide to Retrofitting, Six Ways to Protect Your House From Flooding**, FEMA 312, June 1998
- **Integrating Manmade Hazards Into Mitigation Planning, State and Local Mitigation Planning How-To Guide**, FEMA 386-7, Version 2.0, September 2003
- **Joining the National Flood Insurance Program**, FEMA 496, May 2005
- **Managing Floodplain Development in Approximate Zone A Areas, A Guide for Obtaining and Developing Base (100-Year) Flood Elevations**, FEMA 265, July 1995, with Quick-2, Version 1.0, Computation of Water Surface Elevations in Open Channels
- **Manufactured Home Installation in Flood Hazard Areas**, FEMA 85, September 1985
- **Model Floodplain Management Ordinance for Nevada Communities**, NDWR, December 1999
- **No Adverse Impact, A Toolkit For Common Sense Floodplain Management**, Association of State Floodplain Managers, 2003
- **Protecting Building Utilities From Flood Damage**, FEMA 348, November 1999
- **Protecting Your Home From Flood Damage, Mitigation Ideas For Reducing Flood Loss**, FEMA
- **Protecting Floodplain Resources, A Guidebook for Communities**, Federal Interagency Floodplain Management Task Force
- **Reducing Losses in High Risk Flood Hazard Areas: A Guidebook for Local Officials**, FEMA 116, February 1987
- **Reducing Flood Losses Through the International Codes®, Meeting the Requirements of the National Flood Insurance Program**, 2nd Edition, 2005
- **Subdivision Design in Flood Hazard Areas**, Planning Advisory Service Report Number 473
- **Title 44 Code of Federal Regulation, Parts 59-78, National Flood Insurance (NFIP) Regulations**, Revised October 21, 2002

Emergency Management Institute Training

**Courses Conducted by the
Emergency Management Insti-
tute (EMI)**

Mitigation Curriculum

Schedule for April 1, 2006 through
September 30, 2006

**E172 - Advanced HAZUS Multi-
hazards for Flood**

May 1-4, 2006
August 14-17, 2006

**E194 - Advanced Floodplain Manage-
ment Concepts**

June 26-29, 2006,
August 28-31, 2006

**E241 - Advanced Cooperating Techni-
cal Partners**

September 25-28, 2006

**E273 - Managing Floodplain Develop-
ment thru the NFIP**

July 31-August 3, 2006

**E276 - Benefit-Cost Analysis: Entry-
Level Training**

June 19-21, 2006

**E278 - NFIP/Community Rating Sys-
tem (CRS)**

April 17-20, 2006
August 14-17, 2006
September 18-21, 2006

**E279 - Retrofitting Flood Prone Resi-
dential Buildings**

August 21-25, 2006

**E296 - HAZUS Multi-Hazard/DMA
2000 Risk Assessment**

August 28-30, 2006

**E313 - Basic HAZUS Multi-hazards
(MH)**

July 10-13, 2006

**E317 - Comprehensive Data Manage-
ment for HAZUS Multi-Hazards**

September 11-14, 2006

**E344 - Mitigation Planning for Tribal
Officials**

April 10-13, 2006

How to Apply: Applicants to EMI must submit a Standard General Admission Form (FEMA Form 75-5) to the Nevada Flood-plain Management Program, mthorson@water.nv.gov, or by FAX (775) 684-2811. Forms and detailed information about the courses are available on FEMA's web site: training.fema.gov

FEMA Training for Lenders and Insurance Agents

**Courses Conducted by FEMA
Insurance Contractor, Com-
puter Sciences Corp.**

None scheduled in Nevada at this
time.
Check the FEMA web site
www.fema.gov/regions/ix/r9_nfip.shtm

for a list of Lender and Insurance
Agent Workshops to be held in Re-
gion IX.

How to Apply: Please contact the Edie Lohman at (916) 780-7905, Lohmannnfip@hotmail.com.

Nevada Floodplain Management Training

**Courses Conducted by the
FEMA Region IX and
NDWR**

None scheduled at this time.
Check the NDWR web site
[water.nv.gov/flood/
training_calandar.htm](http://water.nv.gov/flood/training_calandar.htm)

for new postings of workshops as
they become available

How to Apply: For more information or to register, contact Mary Thorson at (775) 684-2865, mthorson@water.nv.gov.

Nevada Flood Management News
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Flood Management News



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