



NEVADA

Flood Management News

Spring 2002

Nevada Division of Water Resources

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DIVISION OF WATER RESOURCES

Spring Fever!

Happy Spring! Here in Northern Nevada we've been enjoying unseasonably warm weather this February and the crocus in my front yard are sufficiently encouraged to attempt an early debut this year. Meanwhile the National Weather Service's Climate Prediction Center is reporting that indeed a warm episode of El Niño conditions is developing in the tropical Pacific. If these warm-ocean conditions hold together, we could be in for a wet Spring with increased risk of FLOODING.

Those of us here in Northern Nevada during the New Year's flooding of January 1997 well remember the impact of warm rains after several moderate to heavy snowstorms in the Sierra Nevada. Local communities here have and continue to take steps through planning, flood mapping, and mitigation activities to be better prepared for the next flood event which will inevitably occur (see article on Surviving Disasters in Carson City and Douglas County, page 2). As always, more can and should be done and we in floodplain management should do all we can to encourage wise development in and around floodplains and enforcement of local community standards in floodplains.

As part of the Floodplain Management Program's efforts to assist local communities with meeting their obligations as participants of the National Flood Insurance Program, we will be offering training on the new FEMA Elevation Certificate in both Northern and Southern Nevada this year. After an overwhelming response from Southern Nevada surveyors to the FEMA Elevation Certificate training offered in November 2001, we will bring the class back to Las Vegas in March and will offer it again in Carson City on May 1st (see announcement on page 7).

Wishing you a happy and disaster-free Spring!

*Kim Groenewold, Program Officer
Floodplain Management Program*

Share Your Success Stories

We invite you to share your successful floodplain management strategies with our readers.

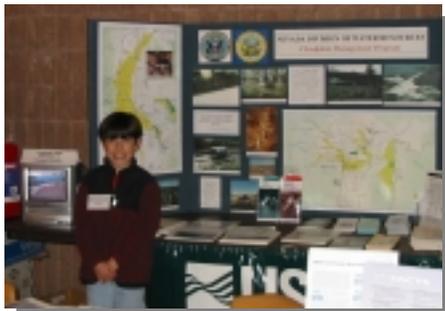
Please forward your story to:

Nevada Division of Water Resources
123 West Nye Lane
Suite 246
Carson City, NV 89706-0818
groenewd@ndwr.state.nv.us

Surviving Disasters in Douglas County and Carson City

Floods, wildland fires, earthquakes, winter storms and even weapons of mass destruction—Douglas County and Carson City residents are now better prepared for these disasters thanks to a **Surviving Disasters** seminar sponsored by Project Impact, Douglas County and Carson City.

On January 24th, Douglas County and Carson City residents learned about natural and some man-caused disasters from a panel of experts, and also what they can do to mitigate the effects of these dis-



Smiling volunteer Matthew Groenewold manning the Floodplain Management Program booth.

asters. "In presenting this information to Douglas County and Carson City residents, those of us

close to emergency planning hope to demonstrate potential hazards in our own backyard," said Ray Masayko, Mayor of Carson City in reference to the seminar. "Awareness is the first step in preparedness."

The evening's panel of experts included:

- **Winter Storms**—Roger Lamoni, National Weather Service
- **Flooding**—John Cobourn, University of Nevada Cooperative Extension
- **Wildland Fires**—Ronna Hubbard, Sierra Front Wildfire Cooperators
- **Earthquakes**—Craig dePolo, Nevada Bureau of Mines and Geology
- **Weapons of Mass Destruction**—Gary Derks, Nevada Division of Emergency Management

The Floodplain Management Program of the Nevada Division of



Anne Jeton (left), hydrologist with the Nevada District Office of the U.S. Geological Survey, Water Resources Division, assists a Carson City couple with understanding their flood risk.

Water Resources (NDWR) was also on hand with flood information at a booth manned by Kim Groenewold of NDWR, and volunteers Anne Jeton of the U.S. Geological Survey (USGS) and Matthew Groenewold of Brown Elementary School (and Kim's son). Flood Insurance Rate Maps for Douglas County and Carson City were made available to the general public for locating property relative to FEMA's mapped flood zones. Anne Jeton, a hydrologist and surface-water modeling specialist with the Water Resources Division of the USGS explained local flood hazards to Douglas County and Carson City residents.

Web Sites to Explore

Association of State Floodplain Managers
www.floods.org

Federal Emergency Management Agency
www.fema.gov

Floodplain Management Association
www.floodplain.org

National Weather Service
www.nws.noaa.gov

Natural Resource Conservation Service
www.nrcs.usda.gov

Nevada Division of Water Resources
ndwr.state.nv.us

U.S. Geological Survey, Water Resources Division, Nevada District
nv.usgs.gov



New NFIP Crawlspace Construction Standards in Special Flood Hazard Areas

Does the crawlspace under your house meet the new NFIP construction standard for buildings in flood zones? FEMA recently released **Technical Bulletin 11-01** entitled **Crawlspace Construction for Buildings Located in Special Flood Hazard Areas**. This bulletin provides interim guidance to communities concerning National Flood Insurance Program requirements for crawlspace construction in Special Flood Hazard Areas.

In portions of the West, it is common practice to construct crawlspaces with the crawlspace floor 1½ or 2 feet below-grade because of frost line considerations. FEMA has included in its definition of a basement any crawlspace that is sub-grade on all four sides. Once defined as a basement, the lowest floor elevation of a building in a Special Flood Hazard Area becomes the elevation of the crawlspace floor.

Since FEMA construction standards in Special Flood Hazard Areas require that buildings have a lowest floor at or above the Base Flood Elevation, this implies that many owners have paid higher insurance premiums for buildings with crawlspaces and that some new construction may have been built in violation of minimum FEMA construction standards. It also implies that some elevation certificates may have been completed incorrectly since the definition of the crawlspace as a basement may not have been widely recognized.

In Technical Bulletin 11-01 FEMA seeks to address the “crawlspace problem” by defining minimum standards

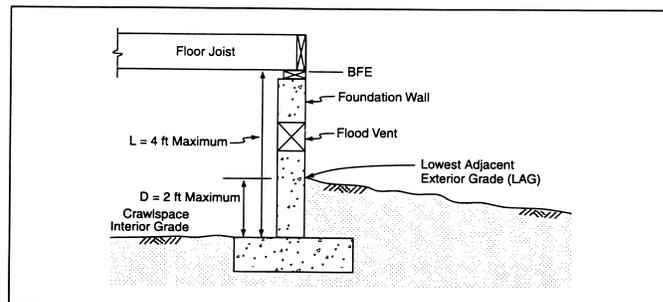
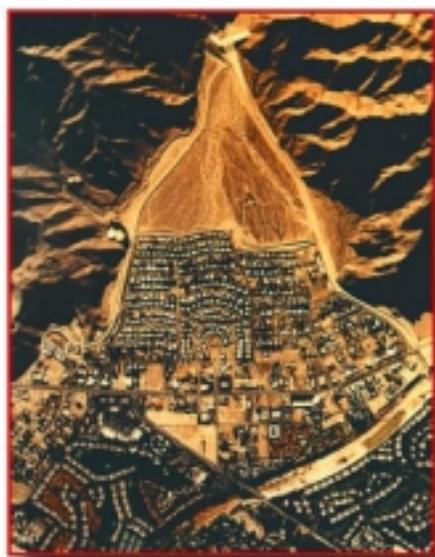


Diagram depicting new requirements regarding below-grade crawlspace construction.

for construction of crawlspaces. As stated in the bulletin, the decision whether or not to allow below-grade crawlspace construction will be left to each community. Communities that choose to allow below-grade crawlspace construction will be required to amend their floodplain management ordinance to include the provisions outlined in the bulletin. Communities that choose to amend their ordinance to allow for below-grade crawlspaces in response to the new interim guidance may be required at some later date to amend their ordinance if FEMA adopts revised regulations that differ from those contained in Technical Bulletin 11-01.

Technical Bulletin 11-01 can be downloaded from FEMA’s website at www.fema.gov/mit/techbul.htm or you can obtain a copy by calling Kim Groenewold, Nevada Floodplain Management Program at (775) 687-4380.



New FEMA Guidelines for Mapping Alluvial Fans

FEMA has recently released “**Guidelines for Determining Flood Hazards on Alluvial Fans**” which details a new approach to mapping flood hazards in the alluvial fan environment. The new guidelines address recommendations in a National Research Council Report on alluvial fan flooding and includes a three-stage approach to identification and mapping:

1. *Determining whether the area under study is an alluvial fan,*
2. *Identifying which portions, if any, of the area are characterized by or subject to active and/or inactive alluvial fan flooding, and*
3. *Defining the base (1-percent-annual-chance) flood within the areas of alluvial fan flooding identified on the alluvial fan.*

The guidelines have been exposed to a peer review and comments from this review process have been incorporated into the final document. Copies of the guidelines may be downloaded in various formats from FEMA’s website www.fema.gov/mit/tsd/ft_alfan.htm.

When Flood Insurance Rate Maps (FIRMs) Change

In January of 2002 certain Carson City residents received letters informing them of impending changes to Special Flood Hazard Area (SFHA) boundaries that would affect their properties. A newspaper article in the *Nevada Appeal* described that while some areas would be removed from SFHAs by proposed changes to Flood Insurance Rate Maps (FIRMs), other areas would be added. When flood zones change on FIRMs due to restudy or map revisions, questions about flood insurance invariably arise.

What are FIRMs?

Flood Insurance Rate Maps (FIRMs) issued by FEMA for the National Flood Insurance Program (NFIP) delineate the Special Flood Hazard Areas (SFHAs) which form the basis for both floodplain management requirements and flood insurance policy rates.

Do FIRMs change?

The FIRMs can be changed if a new Flood Insurance Study is done by the NFIP. They can also be updated through the Letter of Map Revision or Amendment application process when new technical data is submitted to correct the SFHAs depicted on the map. Such changes may be based on the construction of flood control projects that reduce flood risk, accounting for new development that may increase the flood risk and expand the floodplain, or better scientific or technical data that allows the SFHAs to be more accurately drawn.

What is a SFHA?

Special Flood Hazard Areas, or SFHAs, have a 1% or greater chance of being flooded in any given year. They are shown on the FIRMs with flood zone designations that begin with the letter "A." Under the law, federally regulated lenders must require borrowers with buildings located in SFHAs to purchase and maintain flood insurance. Flood zone definitions include:

AE Zone—Area of special flood hazard with Base Flood Elevations determined.

AO Zone—Area of special flood hazard with flood depths of 1 to 3 feet, usually sheet flow on sloping terrain, average depths determined.

AH Zone—Area with flood depths between 1-3 feet, usually areas of ponding, with Base Flood Elevations determined.

B, C, & X Zones—Areas of minimal to moderate flood hazard (flood insurance is available but not required by federally regulated lenders).

Is the purchase of flood insurance mandatory?

The Flood Disaster Protection Act of 1973 and the National Flood Insurance Reform Act of 1994 direct federally regulated lenders to require flood insurance on loans that are secured by a building located in a SFHA. During the term of an existing loan, flood insurance will be required if the lender becomes

aware that the building involved is placed in a SFHA. Flood insurance may also be required when a loan is sold or if the lender does a routine portfolio review. While the mandatory purchase requirement applies only to buildings receiving Federally related assistance that are located in SFHAs, owners of buildings that do not have a mortgage should recognize the identified flood risk and consider the voluntary purchase of flood insurance.

How can I minimize my flood insurance premiums?

The NFIP does recognize policy holders who have remained loyal customers by purchasing and maintaining flood insurance continuously. Those flood insurance policies may be renewed and rated based on the FIRM and flood zone that was in effect on the date the policy was first purchased. This is particularly important for owners of buildings that were constructed before the Pre-/Post-FIRM date. The Pre-/Post-FIRM date is the date that a community converted to the regular program of the NFIP with its first FIRM. Nevada communities can determine their Pre-/Post-FIRM dates from the Community Status List posted on the FEMA website www.fema.gov/reg-ix/r9_nfip.htm or by contacting Kim Groenewold, Floodplain Management Program, Nevada Division of Water Resources at (775) 687-4380 or groenewd@ndwr.state.nv.us.

My home was built above the Base Flood Elevation on the old FIRM. Can I get a break on my insurance premiums?

When revised flood maps or Letters of Map Revision or Amendment are

During the term of an existing loan, flood insurance will be required if the lender becomes aware that the building involved is placed in a Special Flood Hazard Area.

FIRM Change (continued)

issued to update the original FIRM, the NFIP also recognizes buildings constructed in compliance with the FIRM that was in effect at the time of construction. Any building constructed after the first FIRM was issued can obtain flood insurance based on the NFIP flood zone in effect on the date of construction. This applies even after new flood maps are issued that place those buildings in a SFHA.

If a flood insurance policy is purchased after the new flood map becomes effective, and the building is in a SFHA, the following documentation is required by your insurance company to secure the lower premium:

1. The date the building was constructed,
2. The date of the FIRM in effect at the time of construction,
3. The flood zone on the flood map and the Base Flood Elevation, if any, where the building was located at the time of construction, and
4. A statement from the appropriate City or County official that the building was constructed in compliance with the effective FIRM at the time of construction.

If you purchase flood insurance before new maps become effective, your flood insurance can be renewed at the lower rate.

flood insurance coverage on a single-family home located in a B,C, or X Zone will cost \$496 per year. A \$200,000 policy for that same building if purchased after it is placed in AE Zone will be \$840 per year. If flood insurance is purchased before new maps become effective, the flood insurance policy can be renewed at the lower rate. For buildings constructed before the Pre-/Post-FIRM date in an NFIP community, this is the only opportunity to purchase flood insurance at a “grand fathered” rate .

Flood insurance for all structures can be purchased before the effective date of the new map at the lower non-flood prone B, C, or X zone rate without documentation. New or substantially improved buildings constructed in SFHAs after the effective date of the new map, however, will be required to elevate their lowest floor at or above the Base Flood Elevation on the new FIRM.

Where can I buy flood insurance?

Ask your insurance agent providing your homeowners insurance if he or she can write a flood insurance policy. If not, ask for a referral to an agent who can. If

you can't locate an agent who will write a flood policy, call the National Flood Insurance Program (NFIP) telephone center at 1-800-4661 or visit the website www.floodalert.fema.gov to get a list of insurance companies that offer flood insurance in your area.

My home will be remapped from Zone X to Zone A. What can I do to save money on insurance?

The cost of purchasing a flood insurance policy while the building is still in the Zone B, C, or X is much less than the cost of purchasing after it is placed in a SFHA (AE, AO, or AH). For example, \$200,000 of

What about my LOMA?

When a new FIRM becomes effective, it automatically supersedes previously issued Letters of Map Change (LOMCs), including Letters of Map Revision (LOMRs) and Letters of Map Amendment (LOMAs), that have been issued for property (ies) on the revised FIRM panels. LOMCs are documents issued by FEMA that revise or amend the flood hazard information shown on the FIRM without requiring the FIRM to be physically revised and republished. In recognizing that some LOMCs may still be valid even though the flood hazard information on the FIRM has been revised, FEMA has an automatic process for revalidating LOMCs.

This automatic process to revalidate LOMCs includes a detailed comparison of the Base Flood Elevations shown on the new FIRM and the lowest adjacent grade or lowest lot elevation of previously issued LOMCs. Those structures or lots that are above the new Base Flood Elevation or are located in areas of the community that are not affected by updated flood hazard information are revalidated through a formal determination letter that is issued to community officials immediately preceding or following the issuance of the new FIRM. The revalidation letter is also mailed to the community's map repository to be kept on file. If you have questions about revalidation letters, you may call the FEMA Map Assistance Center toll free at 1-877 FEMA MAP (1-877-336-2627). To obtain a copy of a revalidation letter, you may contact the map repository for the community in which the property is located.

Emergency Management Institute Training

Courses Conducted by the Emergency Management Institute

How to Apply:

Applicants to the Emergency Management Institute must complete the

Standard General Admission Form (FEMA Form 75-5) and submit it to Kim Groenewold, Floodplain Management Program, Nevada Division of Water Resources, 123 West Nye Lane, Suite 246, Carson City, Ne-

vada 89706-0818, FAX (775) 687-6972. Forms are available on FEMA's website:

www.fema.gov/emi/rclist.htm

Check training.fema.gov/EMIWeb/train.htm for EMI course schedule



As of the date this issue of the *Nevada Flood Management News* goes to press, the new schedule for courses conducted by the Emergency Management Institute (EMI) from October 2002 through March 2003 (Winter Term 2002) is unavailable.

EMI has implemented a new *National Enrollment System* which limits the period that applications will be accepted for courses each term. Applications for courses conducted by EMI during Winter Term 2002 can be accepted by EMI between June 1st through July 31st, 2002, however they **MUST BE RECEIVED BY THE FLOODPLAIN MANAGEMENT PROGRAM NO LATER THAN JULY 15TH, 2002** to ensure timely processing by the Nevada Division of Water Resource.

FEMA Training for Lenders and Insurance Agents

Courses Conducted by
FEMA Insurance Contractor,
Computer Sciences
Corporation

National Flood Insurance
Program Workshop for Lenders
Washoe County
Central Conference Room

Building C First Floor
Reno, Nevada
July 11, 2002
9:00 am to 12:30 pm

How to Apply: Please contact the Edie Lohman at (916) 780-7889 if you wish to attend a workshop listed above.

Nevada Floodplain Management Training

Courses Conducted by the
FEMA Region IX
and
Nevada Division of Water
Resources

FEMA Elevation Certificate
Training
Las Vegas, Nevada
Clark County Regional Flood
Control District
Meeting Room 108
March 26, 2002
9:00 am to 3:00 pm

FEMA Elevation Certificate
Training
Carson City, Nevada
U.S. Geological Survey
Water Resources Division
Main Conference Room
May 1, 2002
9:00 am to 3:00 pm

How to Apply: For more information or to register, contact Kim Groenewold at (775) 687-4380 or groenewd@ndwr.state.nv.us

"THE FEMA ELEVATION CERTIFICATE"

Hosted by Carson City Building Department

Date: May 1, 2002
Time: 9:00 am – 3:30 pm
Cost: FREE

Intended Audience: Consulting Engineers and Surveyors, Floodplain Administrators, Building, Planning and Public Works Staff from Communities participating in the National Flood Insurance Program

Course Contents: Purpose and Definitions, Special Flood Hazard Area Zones; New crawlspace construction standards, Determining Lowest Floor; Lowest utility servicing the building, Completing the New FEMA Elevation Certificate

Location:
U.S. Geological Survey
– Water Resources Div.
Main Conference Room
333 West Nye Lane
Carson City, Nevada

LIMITED SEATING! PRE-REGISTRATION IS REQUIRED!

First come – first served. Contact:
Kim Groenewold, Nevada Division of Water Resources
123 West Nye Lane, Suite 246, Carson City, NV 89706
(775) 687-4380, FAX (775) 687-6972
groenewd@ndwr.state.nv.us

REGISTRATION FORM

***"The FEMA Elevation Certificate" NFIP Workshop
May 1, 2002, Carson City, Nevada***

**Register by
April 15th!!**

Sign-in begins at 8:30 am; workshop begins at 9:00 am.
Space is limited. YOU MUST PRE-REGISTER!!

Name _____

Title _____

Company/Agency _____

Address _____

City _____ State _____ Zip _____

Telephone _____ FAX _____

Email Address _____

For organizations sending more than one person, please submit individual registration forms for each attendee. This form may be reproduced.

Return registration to:

Kim Groenewold
Nevada Division of Water Resources
123 West Nye Lane, Suite 246
Carson City, Nevada 89706-0818
(775) 687-4380
FAX (775) 687-6972
groenewd@ndwr.state.nv.us

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IMPORTANT NOTICE

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