
Floodplain Management *Today*



NEBRASKA DEPARTMENT OF NATURAL RESOURCES FLOODPLAIN SECTION

SEPTEMBER 2013

Mitigation to Reduce Impacts of BW-12

By Bill Jones, CFM

Flood insurance premiums are likely to increase at a more rapid rate for some types of properties than in the past due to the implementation of the Biggert-Waters Flood Insurance Reform Act of 2012, or BW-12. Premiums on older buildings may increase significantly depending on the rating structure applicable to the building.

Homeowners insurance currently does not include coverage for flooding. Flood insurance, as part of the National Flood Insurance Program (NFIP), is the only way to protect oneself from that natural hazard. In lieu of continuing the annual outlay of funds for flood insurance premiums, homeowners could consider an alternative course of action to reduce the cost of flood insurance. Mitigation measures can both significantly reduce the risk of damage from flooding and could lower the flood insurance premium for some properties.

By the full implementation of the Biggert-Waters Act, all flood insurance is to eventually be actuarially rated for high-risk properties, which means policies must reflect the true cost of the risk of flooding and no policies will be subsidized by the NFIP. The actuarial rating is based on the difference in elevation between the lowest floor elevation and the Base Flood Elevation (BFE) at the structure. Many existing buildings were constructed before regulations were in place requiring the elevation of the lowest floor to be one foot above the BFE. In Nebraska, many homes were constructed with basements well below current regulatory flood elevations. With this scenario, buildings located in a floodplain may have a basement 8 to 10 feet below the BFE. Actuarial rates may result in an increase in premiums of up to several thousand dollars per year.

To mitigate these higher premiums, the building owner could consider altering the structure to reduce the difference between the lowest floor elevation and the BFE. This could mean that utilities would need to be moved and the basement filled with sand or soil, and potentially openings may need to be added to the foundation to provide for flood venting.
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The space lost from filling a basement could be replaced by adding an addition to the structure. If storm protection is important, there is guidance available for construction of safe rooms in elevated buildings. Any activities should be compliant with the local floodplain management ordinance. These types of modifications may be expensive, but flood insurance premiums under the fully implemented Biggert-Waters Flood Insurance Reform Act of 2012 may make modifications cost effective over time. Most importantly, these mitigation actions will also reduce the risk of flooding damage to the building if a flood occurs.

As BW-12 goes to the next phase of implementation on October 1, 2013, affected property owners should ask their insurance agents for assistance with any policy rating questions. For more information about Biggert-Waters, see the following resources:

FEMA Website on BW-12:

<http://www.fema.gov/flood-insurance-reform-act-2012>

Association of State Floodplain Managers (ASFPM) NFIP Information:

<http://www.floods.org/index.asp?menuID=651>

Window Wells and Lowest Adjacent Grade

Provided by Kansas Department of Agriculture

A common question about window wells concerns measuring the lowest adjacent grade (LAG). This question has been answered in different ways by different people in the past. Because the issue with window wells can be confusing, we requested guidance from FEMA on this topic. The Federal Emergency Management Agency (FEMA) Map Information exchange (FMIX) has provided the following information:



"In the situation of a sunken window well, the LAG must be taken at the bottom of the window well. We recommend citing spot elevations within the Comments section of the Elevation Certificate to show the elevation of the surface grade around the top of the window well. Typically, if it is shown that the naturally occurring ground surrounding the structure is equal to or above the base flood elevation (BFE), then it may be possible to issue a favorable determination. However, we may use the intervening high ground consideration only if the request is based on natural ground, without the placement of fill, and the requestor has provided adequate topography to demonstrate that there is sufficient high ground preventing flood waters from reaching the lowest point of the structure (window well)."

Measure LAG at the window well bottom and include notes in the comments section of the elevation certificate form about the ground elevation at the window well top. The MT-EZ form that is used for a Letter of Map Amendment (LOMA) does not have a comments section. A common practice seems to be to put an asterisk by the LAG on the form and a comment with an asterisk about the intervening higher ground where there is room on the form. An elevation certificate with comments also can be turned in with an MT-EZ form.

New Contacts in Floodplain Management

FEMA Region VII New Liaison for Nebraska

Shandi Teltschik has been with the Federal Emergency Management Agency (FEMA) since 2006, primarily working with flood hazard mapping and the National Flood Insurance Program (NFIP). Currently, Shandi serves as the FEMA Region VII NFIP specialist for the State of Nebraska and works full-time from the Omaha area. As part of this role, Shandi acts as a liaison between NDNR and FEMA Region VII to provide information and guidance on floodplain management and NFIP activities. Shandi also assists with community assistance visits and community assistance contacts. Prior to moving to FEMA Region 7, Shandi served as the Branch Chief of the Floodplain Management and Insurance Branch in FEMA Region 8 in Denver.

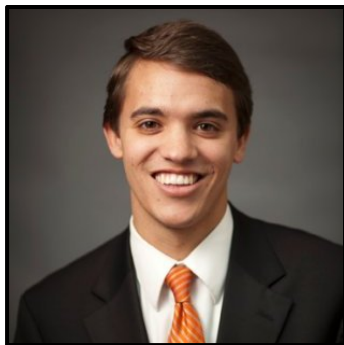


Before joining FEMA, Shandi served as the North Dakota Flood Map Modernization Program Coordinator, as well as a Water Resource Engineer, for the North Dakota State Water Commission.

Shandi received a Bachelor's degree from Texas A&M University with a major in Agricultural Engineering with an emphasis in water resources. She also completed her graduate studies at Texas A&M earning a Master of Engineering in Biological and Agricultural Engineering. As a result of her graduate project work, she was named a co-inventor for a U.S. patent for design of "A System and Method to Dissolve Gases Into Liquids."

Shandi is a licensed Professional Engineer in the State of North Dakota and a Certified Floodplain Manager by the Association of State Floodplain Managers. Shandi can be reached by email at: shandi.teltschik@fema.dhs.gov or by phone at: (816) 808-5281.

New NDNR Flood Mitigation Planning Coordinator



Mitch Paine started with NDNR at the end of August as the new flood mitigation planning coordinator. Mitch will be working on flood mitigation activities including the NFIP Community Rating System (CRS), hazard mitigation plans, and providing technical assistance to communities. Mitch also will be helping prepare a white paper that describes the history of floodplain management in Nebraska.

Before starting at NDNR, Mitch worked for the World Bank on urban issues and prior to that worked for the City of Lincoln Mayor's Office on a variety of energy projects.

Mitch attended the University of Nebraska-Lincoln and received a Bachelor of Science degree in Environmental Economics. Mitch also has a Master of Regional Planning degree from Cornell University and while he was in New York worked with many small communities on comprehensive planning, housing issues, and public works projects.

Mitch can be reached by email at: Mitch.Paine@nebraska.gov or by phone at: (402) 471-9252.

Flood Mitigation Project in DeWitt, Nebraska

By John Callen, P.E., CFM

The Nebraska Department of Natural Resources (NDNR) assists National Flood Insurance Program (NFIP) participating communities and other government entities throughout the State with a wide range of flood mitigation activities. Recently, NDNR helped the Village of DeWitt, NE obtain grant funding through the Federal Emergency Management Agency's (FEMA) Flood Mitigation Assistance (FMA) grant program for a project in the Village.



This project involved installation of several flap gates on existing drainage structures along Highway 103 adjacent to DeWitt. This highway lies between Turkey Creek and the Village of DeWitt. The installation of the flap gates will help reduce the potential for back flow flooding into the Village when Turkey Creek floods. On May 31, 2013, a high water event occurred along Turkey Creek that provided an early test for the newly installed flap gates. They performed as designed and provided effective protection for the Village.

Above is a photo of the project under construction in April and below is a photo of the project in action on May 31, 2013.

One of the reasons this project was funded by FEMA was because of the relatively low cost of the project relative to the benefits. It also fulfills an FMA program requirement of providing flood risk reduction to structures insured under the NFIP.

FMA grants provide a 75% project cost share and can be used either for flood risk mitigation planning or for flood risk mitigation projects. Potential project types include but are not limited to acquisition or elevation of at risk structures, or eligible engineering projects that reduce flood risk to structures. All projects must be cost beneficial according to FEMA's guidelines and may be subject to other eligibility requirements. Recently, FEMA issued updated guidance for the FMA program and the current FMA funding cycle opportunity, which closes October 18, 2013. FEMA also issued updated guidelines for cost effectiveness determinations for acquisition and elevation projects. It is now easier to implement these types of mitigation for at risk structures that are in the regulatory floodplain on FEMA Flood Insurance Rate Maps. For more information on the FMA program and information on potential project eligibility or other technical assistance, please contact Mitch Paine or go to:

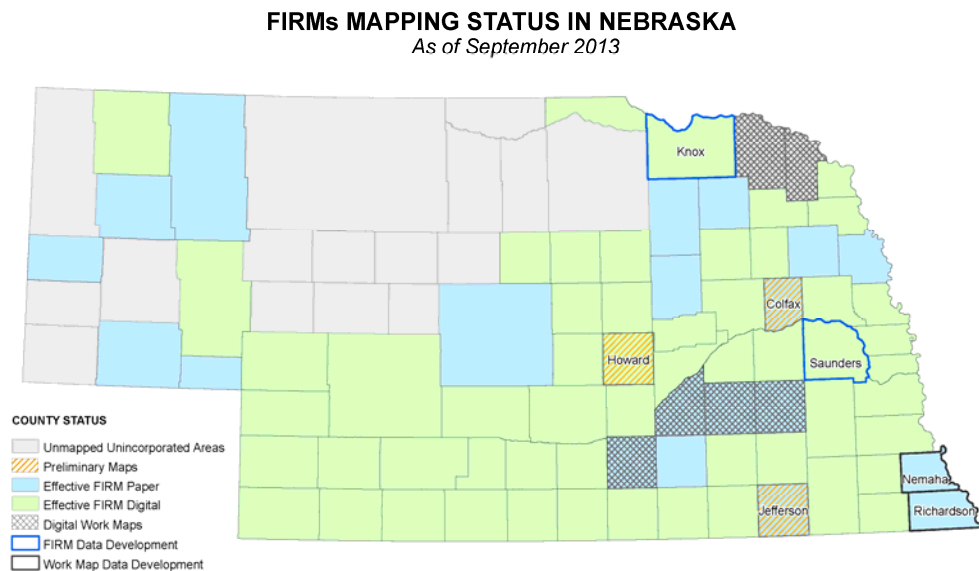


<https://www.fema.gov/flood-mitigation-assistance-program>.

Floodplain Mapping Status Overview

By Katie Ringland, P.E., CFM

NDNR is the state agency responsible for all matters pertaining to floodplain management in Nebraska. This includes providing technical assistance and floodplain maps to Nebraska communities. When possible, NDNR obtains FEMA grants to produce Flood Insurance Rate Maps (FIRM) panels. If FEMA grants are not available NDNR continues to update floodplain maps by producing Work Maps. Work Maps provide communities with the best available data for floodplain management and planning purposes, however they cannot be used for flood insurance rates under the National Flood Insurance Program (NFIP) until converted to a FIRM. The figure below shows the current mapping status of Nebraska's 93 counties. Effective FIRMs, Preliminary FIRMs, and Work Maps are available through NDNR's Interactive Floodplain Map at <http://maps.dnr.ne.gov/Floodplain/default.aspx>.



This figure shows that Nebraska has 55 countywide digital FIRMs, 19 countywide paper FIRMs, 7 countywide Work Maps, and 16 counties without maps. The figure does not show that Nebraska also has 66 incorporated areas with paper FIRMs. Currently, Nebraska has several mapping projects in progress around the state:

Project Name	Project Type	Anticipated Dates
Colfax County	FEMA – Countywide	Effective Date: April 2014
Jefferson County	FEMA – Countywide	Effective Date: May 2014
Big Slough PMR, Howard County	FEMA – PMR*	Effective Date: September 2014
Little Bazile Creek PMR, Bloomfield, Knox County	FEMA – PMR	Preliminary Date: Dec 2013
Wahoo PMR, Wahoo, Saunders County	FEMA – PMR	Preliminary Date: July 2014
Richardson County	NDNR – Work Map	Completion Date: July 2014
Nemaha County	NDNR – Work Map	Completion Date: July 2014

*PMR = Physical Map Revision

Mark Your Calendar

Training Opportunities

If you have questions about any of these opportunities, please contact John Callen or Bill Jones.

Upcoming Events

NDNR and the Nebraska Floodplain and Stormwater Managers Association (NeFSMA) are co-sponsoring a training event that will cover the FEMA Emergency Management Institute course 'Managing Floodplain Development Through the NFIP'. This class is a field deployed version of EMI's E-273 course and a full description can be found in the course catalog on EMI's web site at <http://training.fema.gov/EMI/>. This training covers introductory floodplain management and is highly recommended for any community official whose responsibilities include floodplain management. The four-day course is tentatively planned for late fall. NDNR anticipates knowing the exact dates of the training by early October and will send out detailed information at that time. The training is limited to 35 participants and will be provided at no cost. If you are interested in attending, please e-mail Bill Jones.

NeFSMA holds meetings throughout the year covering a range of floodplain and stormwater management topics. The 2013 NeFSMA Annual Membership Meeting will be held on November 14, 2013 at the New World Inn in Columbus, NE. NDNR representatives will be in attendance at the event and there will be an afternoon session given by NDNR representatives covering basic floodplain management topics which local floodplain administrators can attend at no cost. For more information about NeFSMA including contact details, see <http://www.nefsma.com/> or contact John Callen or Bill Jones. If you are a local floodplain manager interested in attending the afternoon session of the meeting, please contact John Callen.

Online Training Resources

This month, FEMA is offering a series of webinars focused on community resilience. The goal of the **Community Resilience Toolbox training series** is to empower community officials to take action to reduce flood risk by discussing real tools and helpful examples of improved community resilience. No registration is required. To join the meeting on your computer, log into the following link: <https://fema.connectsolutions.com/r33nqlv9yy6/> and to join by phone, call in to 800-320-4330, conference code 478640. For more information about the webinar sessions or questions about logistics, please contact Samara Ebinger at sebinger@dewberry.com or (703) 849-0392 or Maggie Mathis at mmathis@dewberry.com or (703) 849-0330. The series includes the following sessions:

- ***Leveraging Public and Community Data to Assess Local Flood Risk on Thursday, September 26 at 11 a.m. CT.*** This session will provide an overview of available data sets, web services, and applications that community officials can obtain and use for their own purposes, to assess flood risk and impacts within their own communities.

Mark Your Calendar

- ***Low Investment Strategies for Flood Risk Communication on Thursday, October 3 at 11 a.m. CT.*** Communities' limited time and resources are often out of sync with a growing need to communicate frequently and effectively with stakeholders about flood risk. This session will provide ideas for getting the right messages to the right people at the right time leading to action, with a particular focus on two-way communications vehicles.
- ***Reducing Flood Risk Through Mitigation Strategies on Wednesday, October 9 at 11 a.m. CT.*** This session will outline different mitigation strategies communities can use to help reduce current and future flood risk in their community.

STARR Online Training Program

- In partnership with FEMA Region VII, STARR, and other Region VII States, an online training program for community officials is available. This training requires no travel – you can participate and earn CECs toward ASFPM's CFM certification from your own desk. Just go to <http://j.mp/starrwebtraining> and click the *Upcoming* tab to view training details and register. Upcoming online trainings include:
 - ***Substantial Damage Estimation***, presented by Todd Tucker of FEMA Region VII on Wednesday, ***October 2 at 1 p.m. CT.*** After a large-scale hazard event, structures must be evaluated for substantial damage. This one-hour session will walk the attendee through the basics of Substantial Damage Estimation, including downloading and installing the program, as well as gathering and inputting data to assist in the initial substantial damage estimation process for larger scale events.
 - ***CRS Basics***, co-presented by Todd Tucker from FEMA Region VII and Bill Cappuccio of the Iowa Department of Natural Resources on Wednesday, ***October 16 at 1 p.m. CT.*** The National Flood Insurance Program's (NFIP) Community Rating System (CRS) is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. CRS participating communities can get significant flood insurance premium reductions for their citizens by implementing higher standards. In 2012, several updates and changes occurred that effect the NFIP and CRS programs. This session will provide an overview of the benefits of joining the CRS program and changes in the CRS manual.

Additional online trainings in floodplain management and risk reduction presented by STARR include:

- ***Floodplain Development Plan Review*** on September 24 and November 6
- ***Inspecting Floodplain Development*** on September 25 and November 7
- ***Elevation Certificates*** on September 26 and October 23
- ***Elevation Certificates for A Zones*** on October 10
- ***NFIP Basics*** on October 24

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WANT MORE INFORMATION?



Visit DNR's Floodplain Website at
<http://dnr.ne.gov/floodplain/floodplain.html>

Or Contact

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