
Floodplain Management *Today*



NEBRASKA DEPARTMENT OF NATURAL RESOURCES FLOODPLAIN SECTION

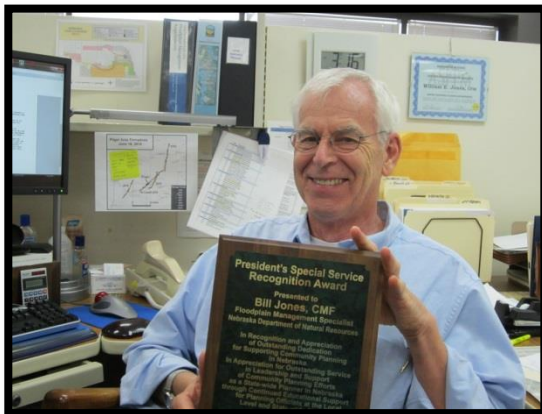
September 2014

Bill Jones is Retiring!

Many local floodplain administrators across the State of Nebraska have worked with Bill Jones at one point or another over the past twenty years and for some he's helped you navigate more than one complicated floodplain management situation. Bill has served the State for 40 years, with the last 19 dedicated to floodplain management. Bill has decided to retire at the end of this month, on September 30th. Anyone interested is invited to join us for a reception to thank Bill - it will be from 2:00 – 4:00 P.M. on Tuesday, September 30th in Lower Level C of the Nebraska State Office building in Lincoln.

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While many of you have worked with Bill to answer your questions, many of us in the floodplain management section of NDNR have worked with Bill our entire careers and have learned a lot from him over the years as well. We'll all miss Bill as our 'go to' floodplain management contact. Over the last few weeks, we've heard from several local floodplain managers who have expressed appreciation for the support Bill has provided them over the years and how much he will be missed. Thank you Bill for your service, and best wishes!

You may also be wondering – if I can't call Bill, who do I call? NDNR is working on implementing a plan for the transition and determining how to fill some very big shoes, but for now you can use the following points of contact after October 1st for any floodplain management assistance question needs:

John Callen – (402) 471-3957; john.callen@nebraska.gov

Andrew Christenson – (402) 471-1223; andrew.christenson@nebraska.gov

Floodplain Administrators' Roles in Disasters

Nebraska has had a slew of natural disasters recently. From the flooding along the Missouri River in 2011 to the tornado activity of 2014, communities have faced the wrath of Mother Nature. In many of these disasters, floodplain administrators have had to become very involved. Floodplain administrators often wear multiple hats, serving additionally as village clerks or emergency managers, but they play crucial floodplain management roles in rebuilding after a disaster.

Rebuilding homes and businesses is a top priority for most homeowners and business owners after a disaster. The floodplain administrator's major role is ensuring that all of the rebuilding complies with floodplain management regulations, particularly the section of local ordinances related to substantial damage. This section requires communities to ensure that structures damaged 50% or more of the pre-damage market value meet all floodplain requirements for new construction. If any rebuilding happens and is noncompliant, the entire community could face negative ramifications from the National Flood Insurance Program (NFIP). Typically, the floodplain administrator is responsible for making substantial damage determinations and ensuring that any permitted construction work is consistent with these determinations.

Some communities develop Standard Operating Procedures (SOP's) for post-flood requirements and likely more communities could benefit from having these SOP's in place. There are a few requirements, however, that all floodplain administrators should know about. The Federal Emergency Management Agency (FEMA) Region VII developed a guide for these that is available on the Nebraska Department of Natural Resources (NDNR's) website at dnr.nebraska.gov/fpm.

Pre-Disaster:

There are a couple things a floodplain administrator could do before any disaster happens to prepare. Knowing your Flood Insurance Rate Maps very well is key to understanding where substantial damage determinations are going to be important. It is also helpful to develop a database of structures located in the floodplain that includes address, market value, and other characteristics. Conducting substantial damage estimates is far easier with this database.

Post-Disaster:

The floodplain administrator has a major responsibility to conduct a post-disaster structure survey, which establishes the data used for a determination of substantial damage. These estimates are critical to have before any property owner attempts to rebuild. If a structure is damaged more than 50% of the pre-damage market value, then it would have to be rebuilt in compliance with floodplain management regulations. Many property owners are likely unaware of this requirement and may need help understanding the regulations.

Floodplain administrators will have to go structure by structure and evaluate damage. In the event of a large disaster, communities can request substantial damage determination assistance from FEMA. The structure-by-structure estimate must be done for any type of damage, including flooding, wind, or fire. Substantial damage estimates should consider damaged structure components like the roof, superstructure, HVAC, doors and windows, etc. All of these estimates can be used to calculate total damage estimates with the Substantial Damage Estimator (SDE) software tool from FEMA. Once the substantial damage estimates are calculated using the software tool, they can be compared to the market value

of the pre-damage structure. Communities should give property owners the opportunity to appeal if they have better data from a professional.

Particularly after a flood disaster, developing a system to post each structure with inspection findings can help facilitate rebuilding. FEMA's guide suggests tags similar to the following:

- White – building damaged, inspection required before re-entry
- Green – building inspected, no apparent hazard, minimum repairs needed
- Yellow – building inspected, minor repairs
- Orange – building inspected, apparent damage in excess of 50%, repairs not authorized until damage extent verified
- Red – building inspected, apparent extensive damage, no re-entry

Associated with these tags would be notice that a floodplain and/or building permit is required before any repairs are done. After the appropriate permits are granted, then the property owner can go about rebuilding. The community should establish a system to continually monitor and inspect rebuilding to ensure compliance.

Lessons Learned

On June 16th, an EF4 tornado struck Pilger, and wiped out over 50 homes and businesses in the center part of town. Much of the town lies in a floodplain and thus many of the structures that were damaged will have to be built back with the lowest floor at higher elevations in order to meet local floodplain regulations. Kim Neiman, the village clerk and floodplain administrator, had a tough set of tasks including conducting substantial damage estimates. She requested help from FEMA Region VII and NDNR and after visiting nearly a dozen structures, she was able to provide damage estimates to all structures in the floodplain that were hit by the tornado. In the end, a number of homes and businesses in Pilger will have to be rebuilt either elevated one foot above Base Flood Elevation (BFE) or floodproofed (non-residential structures only). Once the community is rebuilt, a significant portion of the homes and businesses will be far safer from flooding and if safe rooms are installed, will be safer from tornadoes as well.



Figure 1. Pilger after the tornado



Figure 2. Pilger floodplain map

After the major floods from the Missouri River in 2011, many county floodplain administrators were responsible for substantial damage estimates. Most of the homes along the river that were heavily damaged were built before the floodplain maps were available. Floodplain administrators had to help homeowners understand floodplain regulations and some had to deal with new maps with floodways recently designated. Ultimately, many of the homes that were substantially damaged due to this flood were in the areas of highest flood risk and likely will not be re-built. However, those that are should be at less risk since they will be required to meet current floodplain management regulations and will be elevated.

Flood Protection Information: CRS Activity 350

By Mitch Paine, CFM

Communities get phone calls from their residents, business owners, lenders, and realtors asking for basic information about floodplain management and often these individuals are interested to dive deeper into the topic to learn more. There are some important resources that all communities, not just those in CRS, can have on their websites or in their libraries.

CRS Activity 350 credits materials you put on your website and in your library. Your community website is a useful source of information that many residents, businesses, lenders, and realtors rely on. Many communities disseminate information about flood risk and floodplain management requirements via their websites. The City of Papillion has a very good website that you can view here: http://www.papillion.org/planning_floodplain_information.cfm.

CRS recommends and credits the following items on your website:

1. Coverage of the topics covered by outreach projects such as:
 - a. Know your local flood hazard
 - b. Insure your property
 - c. Protect people from flood hazards
 - d. Protect property from flood hazards
 - e. Build responsibly
 - f. Protect natural floodplain functions
2. Information on flood warning systems, flood safety, and evacuation routes
3. Streamgauge information – you can find out more about streamgages here: <http://water.weather.gov/ahps/>
4. Posting elevation certificates – so people can see elevation information on properties that have certificates on file

Communities should consider putting the following useful FEMA publications in their libraries. 9 points are currently available in CRS:

- *Above the Flood, Elevating Your Floodprone Home*: helps homeowners understand the importance of elevating homes above the floodplain, uses examples from Hurricane Andrew in Miami-Dade County
- *Answers to Questions About the National Flood Insurance Program*: set of frequently asked questions about the NFIP
- *Coastal Construction Manual*: while this sounds like it doesn't apply to Nebraska, many construction methods that are used on the coast could be useful examples for homebuilders here and should be included
- *Elevated Residential Structures*: more technical publication designed for builders and architects to help them understand unique challenges to constructing elevated homes
- *Protecting Manufactured Homes from Floods and Other Hazards*: this is a technical publication that helps people installing manufactured homes understand how to keep them safe from flooding and it includes technical specs for a number of different installation situations
- *Mitigation of Flood and Erosion Damage to Residential Buildings in Coastal Areas*: this document can provide useful references to those in Nebraska looking at specific problems with erosion along our streams

- *Protecting Building Utilities from Flood Damage*: technical document designed for builders, code officials, and others involved in designing utility systems for buildings
- *Protecting Floodplain Resources*: document for communities to understand the natural and beneficial functions of floodplains
- *Reducing Damage from Localized Flooding*: a guide to understanding what can be done in communities to deal with flooding that affects only a handful of properties and might not be on a Flood Insurance Rate Map

There are additional points available for locally-pertinent documents put in libraries. NDNR suggests communities consider putting the following into their libraries:

- FEMA publication *Homeowners Guide to Retrofitting*: helps homeowners understand the various mitigation techniques that can be done to their individual property
- Local hazard mitigation plan
- Local floodplain ordinance
- State floodplain management statutes
- State minimum standards for floodplain management
- Local Flood Insurance Study (available on msc.fema.gov)
- US Army Corps of Engineers studies (if applicable)
- Other locally-produced documents that discuss flood risk or drainage problems

For any of these publications, your community must enter them into the card catalog at your library and provide a sample entry for CRS documentation.


Both having a well-stocked library of floodplain resources and having a useful website adds to the information sources available for your community members to research ways to protect their property from flooding. CRS gives up to 105 points for all of these activities.

Mark Your Calendar

Training Opportunities

If you have questions about these opportunities, contact John Callen or Mitch Paine.

- *Homeowner Flood Insurance Affordability Act of 2014* – presented by Bob Butler of FEMA Region VII **on November 6th at 9:00am**. No pre-registration necessary. Use the following URL and phone number to join: <https://fema.connectsolutions.com/r67bg5x78lp/>, 1-800-320-4330, conference code: 777229
- *Floodplain Administrator Role in Disaster Situations* – presented by Karen McHugh of Missouri State Emergency Management Agency **on December 10th at 10:00am**. No pre-registration necessary. Use the following URL and phone number to join: <https://fema.connectsolutions.com/r3ull363wuu/>, 1-800-320-4330, conference code: 733731
- *Conducting Substantial Improvement and Substantial damage Investigations for Multiple Hazards* – presented by Todd Tucker of FEMA Region VII **on December 17th at 10:00am**. No pre-registration necessary. Use the following URL and phone number to join: <https://fema.connectsolutions.com/r89ehhjc777/>, 1-800-320-4330, code: 188929

 **Floodplain Management *Today***
Nebraska Department of Natural Resources
301 Centennial Mall South, 4th Floor
P.O. Box 94676
Lincoln, NE 68509-4676
29-01-00



WANT MORE INFORMATION?



Visit DNR's Floodplain Website at
<http://dnr.nebraska.gov/fpm>

Or Contact

Katie Ringland, P.E., CFM, Engineer: Engineering, Mapping, and BFEs, 402.471.2094
Bill Jones, CFM, Floodplain Management Specialist: General Questions and the NFIP, 402.471.3932
John Callen, P.E., CFM, Engineer: Engineering and Outreach, 402.471.3957
Mitch Paine, CFM, Flood Mitigation Planning Coordinator: Mitigation and CRS, 402.471.9252
Andrew Christenson, CFM, Floodplain Specialist: BFEs and Floodplain Data, 402.471.1223
Rebecca Groshens, CFM, Floodplain Specialist: Mapping and LiDAR, 402.471.1221
Shuhai Zheng, Ph.D., P.E., CFM, Engineering Programs and Services Division Head, 402.471.3936

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