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# Floodplain Management *Today*



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NEBRASKA DEPARTMENT OF NATURAL RESOURCES FLOODPLAIN SECTION

FEBRUARY 2014

## September 2013 Flooding

After the significant rainfall in mid-September 2013 in the mountains near Boulder and Denver in Colorado, an unprecedented surge of floodwater came downstream to Nebraska. There was concern that the floodwaters could inundate areas along the South Platte and Platte Rivers in Nebraska. Streamgages in Colorado were destroyed by the flooding, so the amount of floodwater that would enter Nebraska was uncertain. NDNR sent streamgaging crews to measure flows in western Nebraska and

obtained data from existing streamgages operated by USGS. The anticipated flood flow data was used by NDNR to map potential inundation areas. NDNR then provided the information to the Nebraska Emergency Management Agency and local governments to assist in the flood response.

NDNR monitored flows as the floodwater continued to move downstream. Record crests in the flow in the South Platte River were recorded near Roscoe (12.2 feet) and North Platte



Figure 1. Before and during flooding view from bridge near Big Springs (NWS)

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and in the Platte River at Maxwell (10.83 feet) and Brady (9.8 feet). As the floodwater moved into Nebraska from Colorado, the flow was approximately 22,000 cubic feet per second.

## Joining the Community Rating System

By Mitch Paine, CFM

The National Flood Insurance Program's (NFIP) Community Rating System (CRS) is a voluntary program that rewards a community's floodplain management activities and can also help flood insurance policyholders see reduced premiums. Many communities in Nebraska have considered CRS and have found that there are many benefits from joining the program. Communities that participate in CRS are safer and more resilient to flood risk because they're doing better floodplain management than required by the NFIP. A reduction in flood insurance premium costs is an additional benefit of these steps taken to improve flood risk awareness and reduce flooding risk. If your community is interested in CRS, you might be wondering what some next steps should be and what benefits your community would receive from participating.

To apply to join the program, your community's mayor or top official would send a letter of interest to FEMA Region VII with some accompanying documents. Then, a specialist affiliated with FEMA would come score the community to determine the flood insurance premium discount available. But, before that happens, there are some CRS activities that you should look at to see how many points you might be able to get when you apply.

CRS is broken out into dozens of "activities" and each is a component of floodplain management, from public outreach to floodprone property acquisition. In each activity, a range of points is available based on verification supplied by the community. All activities are voluntary except two: maintaining elevation certificates (Activity 310) and reviewing repetitive loss structures (Activity 500). Both of these activities must be completed as part of participation in the program. As described in the article on page 6, elevation certificates have to be filled out for all new structures in the floodplain and must be filled out completely using "N/A" instead of leaving lines blank. If your community has repetitive loss properties, you must also map those properties and identify the sources of repetitive flooding.

Except for those required activities, every other element of CRS is voluntary. There is also a set of points for which every Nebraska community is eligible called the Uniform Minimum Credits (UMCs). These are based on State minimum regulations and State floodplain programs. Communities can receive between 130 – 270 points from these UMCs based on freeboard requirements (Activity 430), the State's dam safety program (Activity 630), and other state standards. If a community is located in a county with an online assessor's map, 50 more points might be available because of the map information resources provided through NDNR's Interactive Floodplain Map (Activity 440)(see page 4).

After looking at the required elements and the minimum credit points from the UMCs, a community should start looking at a few other potential activity points. The first is open space in your community's floodplain (Activity 420). CRS gives the most credit to the activities that make the most impact in reducing the community's risk from flooding. Keeping the floodplain in open space ensures that natural functions are protected and structures are not damaged simply because they aren't in the floodplain. If your community has dedicated open space in the floodplain, which could consist of parks, school grounds, and low density zoning area, each of these areas could count for points.

Additionally, all communities in Nebraska should have a Hazard Mitigation Plan that analyzes the risk a community faces from flooding, and elements of these Plans will potentially be eligible for CRS credit (Activity 510). Having a hazard mitigation plan that

focuses on flooding helps a community plan for reducing the risk from flooding through mitigation actions like those credited in the CRS program.

After you look at the UMCs, your open space, and your Hazard Mitigation Plan, your community will have a good start on CRS. In future *Floodplain Management Today* issues, we will look in depth at other CRS credits. If you have any questions or want assistance with CRS, contact Mitch Paine at NDNR at [Mitch.Paine@nebraska.gov](mailto:Mitch.Paine@nebraska.gov)

Nebraska currently has six communities that participate in CRS. Lincoln has the best rating of a Class 6 and flood insurance policyholders combined save an estimated \$392,000 per year. Nebraska as a state sees over \$500,000 in savings due to CRS participation.

Community	CRS Class	CRS Discount	Approximate Savings
<b>Lincoln</b>	6	20%	\$392,000
<b>Valley</b>	8	10%	\$41,000
<b>Papillion</b>	8	10%	\$5,600
<b>DeWitt</b>	9	5%	\$4,000
<b>Omaha</b>	9	5%	\$45,500
<b>Fremont</b>	9	5%	\$44,000
<b>Total:</b>			<b>\$532,100</b>

## October Disaster Declaration – HMGP Funds Available

By Mary Baker, Nebraska Emergency Management Agency

The application process is now open to apply for Hazard Mitigation Grant funding made available Statewide through our latest Presidentially-declared disaster #4156. A variety of projects and initiatives can be submitted for under the HMGP- Hazard Mitigation Grant Program. Projects and Plans applications may be submitted to the State Hazard Mitigation Officer, Mary Baker.

Planning funds are available for drafting new hazard mitigation plans or updating current plans that may be expiring within the next year to 18-months. Initiative project applications, such as a warning system, generators for critical infrastructure or reverse 911 systems, may also be submitted under the current disaster funding. Regular projects may also be considered, which may include but are not limited to: watershed improvement, floodprone property acquisitions or buy outs, or wind/tornado safe room projects, both public and residential.

For more information please contact Mary Baker at [Mary.Baker@nebraska.gov](mailto:Mary.Baker@nebraska.gov) or 402.471.7185.

## **New Websites**

By Mitch Paine, CFM

At the beginning of 2014, NDNR launched a new website. The Floodplain Management section of the website has been completely revamped and will provide floodplain administrators and the general public with a better tool to understand all aspects of floodplain management and mitigation. We will also be maintaining a new section on Training and Workshops that will provide more information on training opportunities. Be sure to bookmark or update your bookmarks to our new website: [dnr.nebraska.gov](http://dnr.nebraska.gov)!

Another website to check out is the flood risk information website, which is part of the Silver Jackets partnership: [floods.dnr.nebraska.gov](http://floods.dnr.nebraska.gov). Silver Jackets is a partnership between federal and state agencies that deal with flooding and the partnership includes NDNR, the Nebraska Emergency Management Agency, the US Army Corps of Engineers (USACE), and other agencies. The partnership aims to cross agency "boundaries" and better develop and present information on flood risk to communities and the public. Regularly, the partners engage in projects to gather better flood risk data. Currently, NDNR and USACE are working on a project to survey and gather elevation information for all floodprone structures in the river-side communities of Louisville and Cedar Creek in Cass County. The information will help both communities make better floodplain management decisions. If the communities decide to apply to join CRS in the future, the additional flood risk information will potentially help the communities obtain more points to reduce their policyholders' flood insurance premiums.

## **NDNR Interactive Map**

By Andrew Christenson, CFM

The Interactive Map is a public tool where users can find flood risk and community information in a convenient and searchable environment. The map is comprised of a set of eight primary information layers and several secondary layers such as section and road lines, topography, imagery and base maps. The primary layers are broken into two general categories: informational layers and flood zones. The informational layers are these: Letter of Map Change (LOMC), Base Flood Elevation (BFE) Requests, Panel Index, and Letter of Map Change (LOMC), Effective Map Date, and Community (Map Index & FIS). The informational layers are meant for users to explore deeper using the "Map Identify" feature of the interactive map tool. Doing so will provide the user access to PDF's of Flood Insurance Rate Maps (FIRMs), community floodplain information, floodplain administrator contact information, and a host of other data.

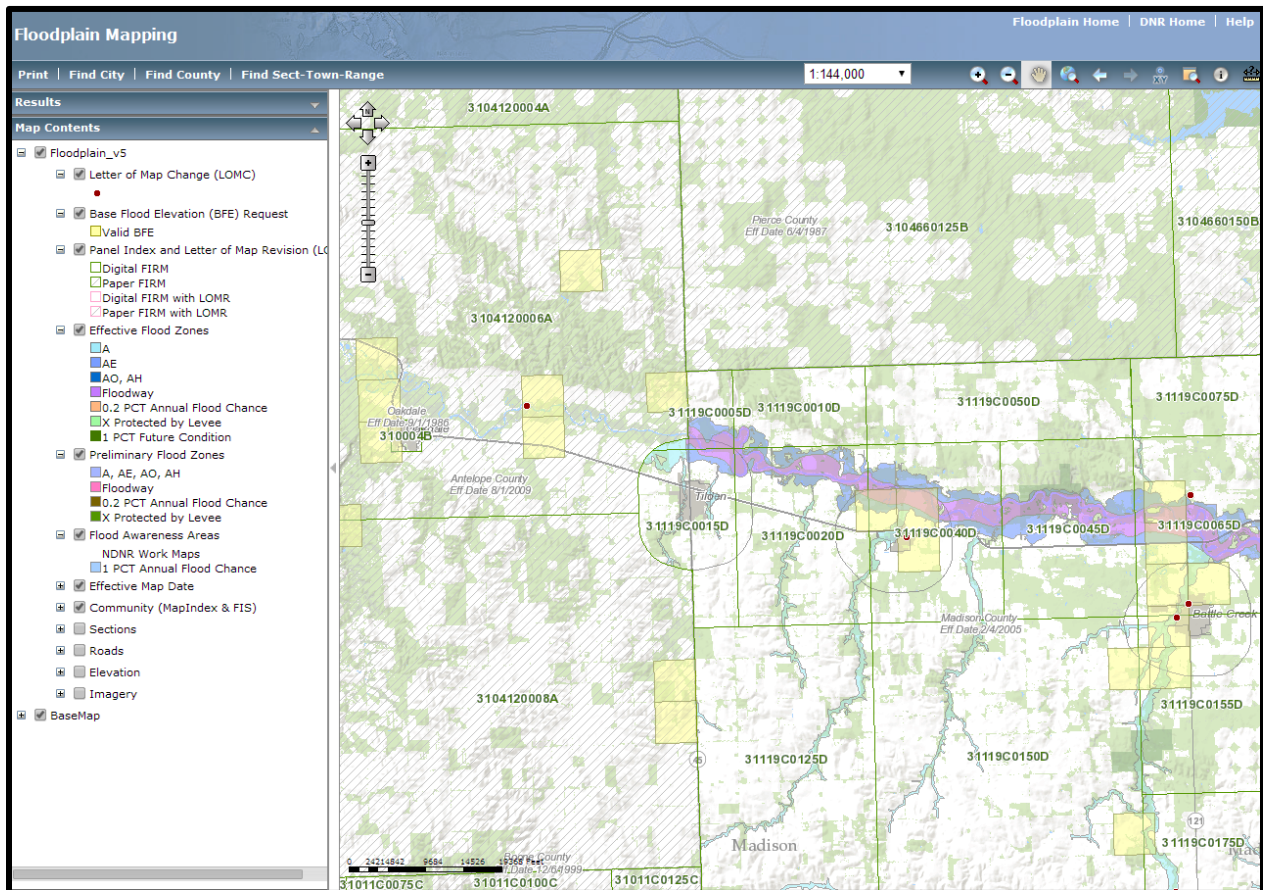
The flood zone layers are these: Effective Flood Zones, Preliminary Flood Zones, and Flood Awareness Areas. Each of the flood zone layers has an associated legend so they can be better viewed. If a county has a Digital Flood Insurance Rate Map (DFIRM), then the Interactive Map layer called "Effective Flood Zones" will show the DFIRM zones. If a county has a FIRM in preliminary status then the layer "Preliminary Flood Zones" will show those. If a county has been a part of the NDNR Work Map process, then those work maps will show up when you turn on the "Flood Awareness Zones" layer. Lastly, if a county has only paper FIRMs, then you can use the Map Identify tool to select the panel from the layer "Panel Index and Letter of Map Revision." Where available, a pdf of the paper map or DFIRM panel



can be reviewed and downloaded by clicking the relevant link from the map Identify drop-down box.

All these layers and the map were built by using FEMA’s National Flood Hazard Layer (NFHL) data as the backbone and then adding and connecting other regularly updated datasets. This way, users can access up-to-date flood risk and community information in addition to the data FEMA has on file regarding communities’ flood risk. The Interactive Map was created to allow for easy and thorough access to public information such as FIRMs and to give the public an insight into the status of the best available data for floodplain management in Nebraska.

The Interactive Map and instructions can be found here: <http://dnr.nebraska.gov/fpm/using-the-floodplain-interactive-map>. For more detailed information, consider attending the February 26<sup>th</sup> webinar on the interactive map. For more information on the webinar and how to sign up, see the training opportunity information on page 7. If you have any questions on how to use the interactive map, contact NDNR.



**Figure 2. Example from the Interactive Floodplain Map that shows Madison, Antelope, and Pierce counties. Note the detailed study in Madison County with no digital maps in the other counties. The yellow squares represent BFE determinations.**

**Note from NDNR:** As a reminder, BFE determinations should only be requested for properties less than 5 acres or fewer than 50 lots. NDNR recommends that floodplain administrators require a site-specific analysis completed by a professional engineer for projects above 5 acres or more than 50 lots.

## **New Information about Elevation Certificates**

By Bill Jones, CFM

Recent changes brought about by the Biggert-Waters Flood Insurance Reform Act of 2012 (BW-12) have changed the flood insurance landscape. Most flood policies and their premiums are eventually to be rated according to their true risk of flooding. Homeowners, insurance agents, or lenders may request from floodplain administrators copies of elevation certificates that are now being required to rate those policies by comparing the lowest floor of the building with the Base Flood Elevation at that location. Owners of Pre-FIRM structures, following a 1-year provisional rating allowance, are for the first time being required to provide elevation information for insurance rating. It is important to understand that communities may not have elevation certificates for all buildings located in their regulatory floodplains. Pre-FIRM, as the name indicates, were already constructed before regulations and flood maps were available. You will likely not have any floodplain permit information on any of those properties, unless they have made application for substantial improvements (improved by more than 50% of the market value of the building prior to improvements). Those individuals who have never acquired elevation certificates for those buildings will need to contact a Nebraska registered land surveyor or professional engineer and have the survey completed on the FEMA Elevation Certificate to rate their flood insurance policies.

The FEMA Elevation Certificate was updated in 2012 and now is the Certificate that should be used for all purposes. The federal Paperwork Reduction Act has established the process where federal agencies, including FEMA, must review and update all forms on a regular schedule. The latest update of the FEMA Elevation Certificate took place on June 18, 2012. The previous version of the Elevation Certificate could optionally be used for one year following that date. Since June 18, 2013 the new Elevation Certificate with an expiration date (located at the top right of the form) of July 31, 2015 is the document that FEMA and the National Flood Insurance Program (NFIP) require for all business, related to NFIP/FEMA programs. (The Elevation Form in the MT-EZ and MT-1 Form may be used in lieu for Letters of Map Change).

Participants in the Community Rating System (CRS) have their floodplain management programs audited on a regular basis. A key component of being eligible to participate in this program is to maintain permits and "fully completed" elevation certificates. Surveyors may not be fully completing elevation certificates. Even if they are not obtaining information for every line item on the certificate, surveyors/engineers should complete the form with the relevant information they obtain and fill the remainder of the document blanks with N/A or zero (0) to ensure that the document is not altered. For example, line C2, c) asks for the "bottom of the lowest horizontal structural member (V Zones only)," but Nebraska doesn't have any V zones. Surveyors or engineers must write "N/A" in this category. Elevation certificates are the best way to understand a property's true flood risk, so even if a community does not participate in CRS, surveyors should completely fill out elevation certificates.

## Mark Your Calendar

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

The Nebraska Planning and Zoning Association and the Nebraska chapter of the American Planning Association coordinate an annual conference. This year's conference will be held from March 19-21 and will feature a session on floodplain management and future growth as well as stormwater management and planning.

The Nebraska Floodplain and Stormwater Managers Association Annual Conference will be held on July 17<sup>th</sup>, 2014 in Kearney. Be sure to put this on your calendar!

### **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/starronlinetraining> and click the *Upcoming* tab to view training details and register. Upcoming online trainings include:

- **Nebraska's Newly Enhanced Floodplain Interactive Map.** This session will be presented by Andrew Christenson of the Nebraska Department of Natural Resources on **Wednesday, February 26 at 1:30 pm CT**. The session will focus on application of the interactive map and data available for users interested in floodplain information.
- **CRS Basics** will be co-presented by Todd Tucker and Bob Butler from FEMA Region VII. This session will provide an overview of the benefits of joining the CRS program and changes in the CRS manual. *This session will be presented in April 2014, specific date/time to be announced.*

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

- **Determining Base Flood Elevations** on February 27
- **NFIP Basics** on March 12
- **Elevation Certificates for A Zones** on March 13
- **CRS: Introduction** on March 18
- **CRS: Outreach Projects** on March 19
- **Elevation Certificates** on April 17



**Floodplain Management *Today***

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**WANT MORE INFORMATION?**



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

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This newsletter is produced by the NDNR Floodplain Section and is partially supported by funding under a Cooperative Agreement with the Federal Emergency Management Agency. The contents do not necessarily reflect the view and policies of the federal government.