



NFIP/CRS UPDATE

February 2014

Colorado Flood Losses Reduced by CRS Activities

by **Marsha Hilmes-Robinson, CFM**
CRS Committee Chair,
Colorado Association of Stormwater and Floodplain Managers

The 2013 flooding affected numerous communities along the Front Range and eastern plains of Colorado. We have all seen and heard about the damaged and destroyed homes and businesses, the hundreds of miles of roads that were damaged or destroyed, and the millions of dollars in public infrastructure that was damaged. This was a major event that will take years for recovery. However, what we may not hear so much about are the success stories. These are the floodplain regulations and stormwater mitigation projects implemented long before the floods happened. These successes are the result of decades-long work by stormwater and floodplain managers, community officials, and citizens to protect against future flood events. If not for these efforts, the damage could have been worse.

*Editor's note: This article was reprinted, with permission, from pages 6–9 of the Winter 2014 edition of **The Open Channel**, the newsletter of the Colorado Association of Stormwater and Floodplain Managers.*

The Community Rating System provides a framework for the NFIP to recognize communities looking to go above and beyond the minimum FEMA floodplain standards. It credits communities for various floodplain management activities ranging from public education, drainage system maintenance, higher regulatory standards, open space preservation, and flood warning. Members of the Colorado Association of Stormwater and Floodplain Managers' CRS Committee compiled the following examples of how the CRS promotes sound floodplain management and reduces the impact floods have on our communities.

In Boulder, the Toby Lane Development was Undamaged

The Toby Lane Development was within the newly re-mapped floodplain of South Boulder Creek. The City of Boulder started regulating development in the remapped floodplain before

[continued on next page]

Also in this Issue

CRS Q&A	6	New Regional CRS Coordinators	8
CRS Award Deadline Extended	6	Webinars	9
Debbie's Dish	7	Training Opportunities.....	9

Colorado CRS Successes (cont.)



Photo 1. The Toby Lane Development in Boulder was protected from flood damage in September 2013 because the homes were elevated two feet above the 100-year flood elevation.

the flood map was finalized by FEMA. Houses were required to meet the City’s higher freeboard standard of two feet above the 100-year flood elevation (see photo 1). Because the homes were elevated, they were not damaged in the flood.

These efforts are creditable under CRS Activity 430 (Higher Regulatory Standards) (freeboard of two feet) and Activity 410 (Additional Flood Data) (new study).

—submitted by Katie Knapp, P.E., CFM, Engineering Project Manager

Fort Collins Acquisition Projects and Open Space Preservation Minimize Damage

The flooding on the Poudre River was a 50-year event with a flow of approximately 10,400 cfs at the mouth of the canyon. There was very minor damage within city limits in large part due to the preservation of open space and acquisition of high risk structures. For several decades, the Fort Collins Natural Areas Program has proactively purchased property along the Poudre River corridor, most of which is in the floodplain. In addition, the City’s Parks Department owns and maintains several parks. The table below compares the floodplain acreage in the city limits to the amount of open space preserved by the City of Fort Collins. Preserving this land as open space not only minimizes damage during a flood, but also enhances the natural and beneficial functions of the floodplain, including allowing floodwaters to spread out and slow down and providing beneficial habitat (see photo 2).

100-year Floodplain Preserved in Parks	100-year Floodplain Preserved as Natural Area	Total Preserved Open Space	Total 100-year Floodplain inside City Limits	Of the Poudre River’s 100-year floodplain within Fort Collins, 66% is preserved as open space.
54.8 acres	923.9 acres	978.7 acres	1484.6 acres	

In addition to preserving large tracts of open space, the City’s Stormwater Department, in coordination with the Natural Areas Department, purchased several properties in the vicinity of College Avenue and Vine Drive as part of a willing seller–willing buyer program. Two commercial structures and one residential structure have been removed. At the time of the flood,

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Colorado CRS Successes (cont.)



Photo 2. Open space preserved in the McMurry Natural Area and Legacy Park along the Poudre River in Fort Collins. Floodwaters in September 2013 were able to spread out and slow down and not cause any damage.

a second residential structure had been purchased, but the building had not yet been demolished. That structure had 8-10 inches of water in the basement from the flood and is expected to be removed in the near future.

These efforts are creditable under CRS Activity 420 (Open Space Preservation) and Activity 520 (Acquisition).

—submitted by Marsha Hilmes-Robinson, CFM, Floodplain Administrator

Bear Creek Lake Park in Lakewood Does its Job and Now Begins its Recovery

Bear Creek Lake is located at the confluence of Bear Creek and Turkey Creek and is part of the Tri-Lakes projects built by the Army Corps of Engineers to control flooding on the South Platte River through Denver. Completed in 1982, the dam and reservoir collect runoff from a tributary area of approximately 236 square miles in the mountains between Mount Evans and Bear Creek Lake Park. The dam can handle a rise in the water level to 109 feet above normal.

During the height of the fall floods, the park's water level rose roughly 55 feet above normal. The park, more than 2500 acres in size, suffered substantial damage due to the high water level, but functioned as it should and protected many people and properties downstream. The water level climbed high enough to submerge picnic shelters, restrooms, docks, and trails. The cottonwood trees near the reservoir show the high water level: the foliage below the water was destroyed, leaving the tops of the trees above the water untouched (photos 3 and 4).

Repairs to the park are expected to cost more than \$300,000 and will include repairing damaged structures, rebuilding trails, and removing flood debris. To help with the park's recovery, an outpouring of more than 150 community members, high school students, Boy Scout troops, and others have volunteered their time. Numerous residents have also donated money to assist in the recovery costs.

These efforts are creditable under CRS Activity 420 (Open Space Preservation).

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Colorado CRS Successes (cont.)



Photo 3. Bear Lake Park in Lakewood showing the 2013 high water line on the trees. The water level rose 55 feet during the September flooding. *[photo by Lakewood resident Carole Kaune]*

Photo 4. Cottonwood trees in Bear Lake Park dramatically show the high water line from the September 2013 flooding. The leaves below the high water line were destroyed, leaving the tops of the trees untouched and still able to display their fall colors.



—submitted by Marty Wilson-Lloyd, Construction Document Technician and CRS Coordinator

In the Town of Estes Park, Stream Setbacks and Elevation Show Their Value

The Town of Estes Park has not yet joined the CRS. However, they have been looking into the program for a number of years. They already have proactive standards in place that helped provide protection during the 2013 flooding. In the Town’s Land Use Code, there are stream setbacks that in most cases result in new construction’s being located outside the Special Flood Hazard Area. In the past 15 years, only four permits have been issued for new structures in the 100-year floodplain. All of these buildings were permitted before the Town adopted freeboard standards. However, building permit staff “highly encouraged” those property owners to elevate

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Colorado CRS Successes (cont.)

the new structures. That recommendation paid off because all were elevated 2–3 feet above the 100-year flood level and none was damaged in the September floods (photos 5 and 6). In fact, every building that sustained structural damage, including one that was completely destroyed, was outside the mapped floodplain. The town of Estes Park now has a required freeboard standard of one foot.

Photo 5. An Estes Park business owner next to his building, which was not damaged in the 2013 flooding because the structure was elevated.



Photo 6. View behind the elevated structure looking at the Big Thompson River during the 2013 flooding.

These efforts are creditable under CRS Activities 420 (Open Space Preservation) (natural shoreline protection) and Activity 430 (Higher Regulatory Standards) (freeboard of one foot)

—submitted by Will Birchfield, CFM, Chief Building Official

Summary

We all know that there will be flooding in the future. We just don't always know when or where. However, by learning from the past, examining successful mitigation strategies, and implementing sound floodplain management programs, such as those credited under FEMA's Community Rating System, we can build more resilient communities for the future. ≡ ≡ ≡

The CRS — QUESTIONS & ANSWERS

— Answers to actual questions posed by CRS communities —

Retention of Records

Q *Is there a federal code regulation citation where this change [retaining building permits for 5 years] in the CRS parameter is highlighted, other than the April 2013 CRS Coordinator's Manual?*

A There is no particular citation to the *Code of Federal Regulations (CFR)* for the CRS records retention requirements. The *CRS Coordinator's Manual* contains all program requirements. As you know, the CRS is a voluntary program under the National Flood Insurance Program (NFIP), and the requirements of the CRS only apply to communities that choose to participate and not to all communities in the NFIP.

The requirement in the 2013 *CRS Coordinator's Manual* that communities maintain/retain records is not a new requirement. Page 110-4 of the 2007 *Coordinator's Manual* says that a CRS community's responsibilities include

- Maintaining elevation certificates, other permit records, and old Flood Insurance Rate Maps (FIRMs) forever, and
- Maintaining other records of its activities for five years, or until the next verification visit, whichever comes sooner.

Page 110-9 of the 2013 *Coordinator's Manual* says a community's obligation is

- Keeping elevation certificates, old FIRMs, and old Flood Insurance Studies for as long as the community is in the CRS; and
- Keeping the records iterated in the activities' documentation sections until they are reviewed at the verification visit.

The five-year period relates to the periodic verification of a CRS community's floodplain management program. Most CRS communities receive a cycle verification visit from an ISO/CRS Specialist (FEMA's contractor) every five years. Communities with higher/better CRS ratings may be visited every three years. Since the start of the CRS, communities have been required to maintain records from their current cycle visit until their next cycle visit to enable the ISO/CRS Specialist to examine their program implementation. ≡ ≡ ≡

Nomination Period for CRS Award Extended

The deadline for submitting nominations for the 2014 CRS Award for Excellence has been extended to **March 28, 2014**. The award acknowledges outstanding effort by an individual at the local level to improve people's understanding of the dangers of flooding and the ways flood damage can be avoided, promote the purchase of flood insurance, and contribute to community well-being.

A nominee for the award can be a local government official, insurance agent, business professional, real estate professional, floodplain manager, or other local leader.

More details and nomination forms for the CRS Award for Excellence can be downloaded from the web at <http://www.fema.gov/media-library/assets/documents/17014>.

DEBBIE'S DISH on CRS Users Groups

Debbie Cahoon Vascik, CFM
Users Groups Liaison

Spotlight on MOKAN

Last week, I was sitting at my computer trying to think of a topic for this month's issue when I received an email about a new website launched by one of the Users Groups. This particular group is made up of CRS communities from three states: Missouri, Kansas, and Nebraska (hence its name, "MOKAN"). This group hit the ground running and hasn't stopped to take a breath yet. So for this article, I decided to catch up with one of the country's most aggressive and innovative proponents of the CRS program, Melissa Mitchell of MOKAN, to ask her a few questions about why she does what she does and how she does it so well.

What motivated you to start a CRS Users Group?

I was encouraged by our State NFIP Coordinator and our ISO/CRS Specialist to give it a go. With the growing number of CRS communities, the need for shared resources and an avenue of communication was starting to develop.

How are you able to balance the needs of the Users Group with your fulltime job?

Good question! We operate primarily through emails and that has opened up a nice line of communication with other communities. Our training sessions are now open via conference call, so we are more accessible. We have a quarterly newsletter and plan our training topics in advance, so it's all easily manageable. We all wear multiple hats at our jobs, so making MOKAN accessible is very important.

How do you keep up the momentum in the group so that meetings are well attended?

I try to target the "hot topics." For example, we have a round of new applicants and five-year cycles, so we have been emailing helpful tools for CRS credit points. We are targeting information for RLAA (repetitive loss area analysis) and FMP (floodplain management planning), since we have multiple county hazard mitigation plans in draft status. I keep my ear to the ground on what's coming up and prioritize from there. Our ISO/CRS Specialist, Christina Groves, is fantastic at giving me topics based on what she is encountering.

What are the biggest challenges to maintaining a Users Group?

Participation. There is no easier way to say this—one person can't be the "Users Group." I've met some wonderful people though training and conferences, and I reach out to communities for participation with the newsletter and hosting training sessions. Jonathan Wiles with the City of Shawnee has volunteered to be my counterpart and our webmaster. This quarter, we are calling on people to help with an education committee, rolling out a website, and planning to tackle some larger activities for the Users Group. More recently, Nebraska has joined MOKAN. It will be really exciting to see how MOKAN grows!

I send a big THANK YOU to Melissa Mitchell for answering my questions and sharing her insight and advice. Not only do Users Groups help the communities within that group, but they are also great at helping other Users Groups. We can all learn a thing or two from other people and their experiences. Congratulations to MOKAN for all of its achievements and successes. Keep up the good work! ≡≡≡

New Regional CRS Coordinators

There have been a few changes in the CRS Coordinator positions at the FEMA Regional Offices. The list below brings their contact information up to date.

Region I	Chris Markesich	(617) 832-4712	Christopher.Markesich@fema.dhs.gov
Region II	Crystal Tramunti	(212) 680-3625	Crystal.Tramunti@fema.dhs.gov
Region III	Mari Radford	(215) 931-2880	Mari.Radford@fema.dhs.gov
Region IV	Janice Mitchell	(770) 220-5441	Janice.Mitchell@fema.dhs.gov
Region V	John Devine, CFM	(312) 408-5567	John.Devine@fema.dhs.gov
Region VI	Jack Graham	(940) 898-5463	Jack.Graham@fema.dhs.gov
Region VII	Bob Butler	(816) 283-7980	Robert.Butler@fema.dhs.gov
Region VIII	Barbara Fitzpatrick	(303) 235-4715	Barbara.Fitzpatrick@fema.dhs.gov
Region IX	Patricia Rippe	(510) 627-7015	Patricia.Rippe@fema.dhs.gov
Region X	John Graves, CFM	(425) 487-4737	John.Graves@fema.dhs.gov

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The Online Scoop

Don't forget to check www.CRSresources.org for frequently updated CRS information. New items are always being added. The intent is to have posted at this site all the references that are listed in the 2013 *CRS Coordinator's Manual*. Most of them are posted now, but some, especially the auxiliary publications, have not yet been finalized. CRS Technical Reviewers and other experts often need several months of feedback from communities before they are able to formulate reliable guidelines and good examples for other communities to use. Rest assured that the pertinent documents are being posted as soon as they are available. If you note something that is missing—and ought to be there—please notify your ISO/CRS Specialist or email NFIPCRS@iso.com, and we will remedy the situation as soon as possible. Among the recent additions to the website are

- **State Profiles**—an updated summary of NFIP- and CRS-related information for the communities in each state, including policies in force, CRS premium discounts, and CRS credit points for each element. www.CRSresources.org/200-2.
- **State Uniform Minimum Credit Summaries**—an updated a state-by-state list of the CRS credits available to communities in that state (Uniform Minimum Credit, or UMC) for certain state laws, regulations, and standards that support floodplain management and have proven effective in reducing flood damage. www.CRSresources.org/200-2.
- The last issue of the *NFIP/CRS Update* newsletter, in case you missed it (December 2013). www.CRSresources.org/100-2.
- Fixes to reported technological problems in the **CRS Community Self Assessment** (Section 240) are underway.
- The new **Training** tab at www.CRSresources.org/training lists upcoming webinars and other activities designed to improve individual and community capability in improving floodplain management programs and working within the CRS. ≡ ≡ ≡

Training Opportunities

Webinars

The CRS offers webinars and workshops to help communities with their CRS requirements. If you are interested in having a webinar on the new *Coordinator's Manual*, the FEMA Elevation Certificate, or any other activity, contact your ISO/CRS Specialist. The following one-hour topical webinars are anticipated, and can be scheduled as needed. Many of these will be recorded, so they can be accessed later. To register, go to www.CRSresources.org/training. Registration is free, but required, as space is limited.

- Introduction to the CRS—March 18, 2014, 1:00 pm EST/10:00 am PST
May 20, 2014, 1:00 pm EST/ 10:00 am PST
July 15, 2014, 1:00 pm EST/10:00 am PST
- Activity 330 (Outreach Projects) covers changes in credit for outreach projects and advice on how to modify a community program. The course provides 1 CEC for CFMs.
—March 19, 2014, 1:00 pm EST/ 10:00 am PST
April 16, 2014, 1:00 pm EST/10:00 am PST
- Activity 430 (Higher Regulatory Standards)— March 19, 2014, 1:00 pm EST/10:00 am PST
May 21, 2014, 1:00 pm EST/10:00 am PST
- Preparing for a Verification Visit with the 2013 *Coordinator's Manual*.
—April 16, 2014, 1:00 pm EST/10:00 am PST
June 17, 2014, 1:00 pm EST/10:00 am PST

Some of the other webinars anticipated in 2014 and 2015 are

- Activity 420 (Open Space and Natural Functions)
- Activity 540 (Drainage System Maintenance)
- CRS Credit for Public Information—the 300 Series
- CRS Credit for Mapping and Regulations—the 400 Series
- CRS Credit for Flood Damage Reduction—the 500 Series
- CRS Credit for Warning and Response—the 600 Series
- Preparing for the Annual CRS Recertification
- How FloodSmart Tools can help CRS Communities
- CRS and Climate Change

For more on the CRS webinar series, to register, and to obtain agendas and required materials, go to www.CRSresources.org/training/. If you have questions about the CRS Webinar Series or suggestions for future topics, please contact Becca.Croft@atkinsglobal.com.

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Training Opportunities (cont.)

Webinars on Record

“RiskMAP and CRS Synergy” is a recorded, one-hour webinar that introduces FEMA’s Community Rating System and RiskMAP initiative and shows how communities can use both to improve their floodplain management programs. Class materials, including the handouts, the presentation slides, and a summary of the Q & A are available for download at http://www.starr-team.com/starr/Training_Materials/Risk_MAP-CRS_Synergy. The recorded webinar can be accessed at <http://j.mp/starr-recorded-training> (click on “Recorded Sessions” at the left).

Workshops and Training related to the CRS

- **The Community Rating System (E278)** (field-deployed course is designated as L278)
Emergency Management Institute (Emmitsburg, Maryland) April 7–10, 2014;
..... June 23–26, 2014; August 11–14, 2014

This is the all-purpose training course for the CRS. It is taught at both the Emergency Management Institute (see below) and at sites throughout the country at the request of interested communities, groups, or states, pending available funding. It is based on the 2013 *CRS Coordinator’s Manual*.

- Attendees of previous E278 CRS courses may want to repeat this course. Therefore, restrictions on repeat attendance have been waived.
- For continuing education credit for Certified Floodplain Managers, the ASFPM will award CECs earned at the E278 CRS course even if the CFM[®] attended the course when it was based on a previous *CRS Coordinator’s Manual*.
- No more than two persons per community may attend at one time.

Prerequisite: To enroll in the CRS course, you must be a Certified Floodplain Manager (CFM[®]), or have completed the National Flood Insurance Program course listed below (E273), or be a full-time floodplain manager with more than two years of experience specifically related to floodplain management.

- **HAZUS-MH for Flood (E172)** April 21–24, 2014
- **Advanced Floodplain Management Concepts (E194)** August 25–28, 2014
- **Advanced Floodplain Management Concepts II (E282)** April 14–17, 2014
- **Advanced Floodplain Management Concepts III (E284)** July 21–24, 2014
- **Managing Floodplain Development through the NFIP (E273)**..... March 17–20, 2014;
..... May 5–8, 2014; June 16–19, 2014; September 15–18, 2014

E273 is also field deployed periodically. Contact your State NFIP Coordinator for more information (see <http://www.floods.org/index.asp?menuID=274>).

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Training Opportunities (cont.)

- **Retrofitting Floodprone Residential Buildings (E279)**April 14–17, 2014;
.....July 28–31 2014
- **Residential Coastal Construction (E386)**August 18–21, 2014

CRS communities can receive CRS credit points after their staff members complete certain training sessions. Under Section 432.o, regulations administration (RA) of the *Coordinator's Manual*, five points are provided for each member of a community's floodplain permit staff who graduates from courses E194, E273, E278, E282, E284, or E386 (up to 25 points). Graduating from E279 is worth five points under Activity 360 (Flood Protection Assistance).

About the Emergency Management Institute

FEMA's Emergency Management Institute (EMI), in Emmitsburg, Maryland, offers training on topics related to floodplain management, mitigation, and construction, including the basic CRS course (E278). These are oriented to local building, zoning, planning, and engineering officials. Tuition is free for state and local government officials, travel stipends are available, and on-campus lodging is free. Free transportation is provided from the airport to the campus and back to the airport. The only out-of-pocket expense is a meal ticket—all-you-can-eat breakfast, lunch, and dinner. Go to the EMI website for specific details at http://www.usfa.fema.gov/downloads/pdf/NETC_Welcome_Package.pdf. The application to attend can be found at <http://training.fema.gov/Apply/>, or call EMI at 1-800-238-3358 or (301) 447-1035. Signed applications should be submitted through the state's Emergency Management Training Officer.

Bring the CRS to Your Hometown

In 2014 the CRS expects to conduct the field-deployed CRS course (L278, the same as the Emergency Management Institute's E278, but tailored to local conditions), depending on funding availability. The new *CRS Coordinator's Manual* and increased interest by non-CRS communities are generating a growing demand for CRS training. A state, CRS Users Group, or organization that would like to host a course or discuss CRS training opportunities should contact its FEMA Regional CRS Coordinator. See www.CRSresources.org/100.

Statement of Purpose

The *NFIP/CRS Update* is a publication of the National Flood Insurance Program's Community Rating System. It provides local officials and others interested in the CRS with news they can use.

The *NFIP/CRS Update* is produced in alternate months. It is distributed electronically, at no cost, to local and state officials, consultants, and other interested persons. Communities are encouraged to copy and/or circulate the *Update* and to reprint its articles in their own local, state, or regional newsletters. No special permission is needed.

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