NFIP/CRS UPDATE

August / September 2014

FEMA's Building Science Branch supports CRS Communities

The Building Science Branch at FEMA leads the way in providing communities with state-of-the-art technical guidance in minimizing loss of life and reducing property damage from floods and other natural disasters. The branch provides technical support for the Federal Insurance and Mitigation Administration (FIMA), which administers the Community Rating System. Other beneficiaries of the Building Science Branch's multi-hazard focus include the National Earthquake Hazards Reduction Program, the National Windstorm Impact Reduction Program, and the Hazard Mitigation Assistance (HMA) Program.

Several Building Science efforts are already familiar to CRS communities and CRS Coordinators.

- The well-known Mitigation Assessment Teams, [www.fema.gov/mitigation-assessment-team-program] which are deployed to conduct post-disaster building performance investigations, are a Building Science Branch program. These teams conduct the damage analyses that are critical to developing our knowledge of precisely which techniques actually reduce damage—and accompanying losses—during floods and other natural disasters. This is vital to the CRS, whose premium reductions are based on the known effectiveness of certain mitigation techniques.
- The invaluable *Coastal Construction Manual* (FEMA P-55) [www.fema.gov/residential-coastal-construction#1], now in its fourth edition, gives a comprehensive approach to planning, siting, designing, building, and maintaining homes in the coastal environment. It was originally developed over three decades ago, and Building Science has shepherded it through continual careful revisions to give design professionals and community officials a current resource for improving building safety in these hazardous areas. The associated Residential Coastal Construction course is highly regarded and delivered at the Emergency Management Institute by nationally recognized subject-matter experts.
- The NFIP Technical Bulletins [www.fema.gov/site-page/nfip-technical-bulletins] are a series of a dozen guides on various aspects of building requirements. They provide details about meeting the minimum NFIP requirements, but they also describe best practices and shed light on ways in which going beyond the basics can further protect buildings and communities. Individual bulletins address openings in foundation walls and enclosures, wet floodproofing, breakaway walls, and other topics.

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Building Science Branch (cont.)

- The comprehensive flood retrofitting guides for residential design professionals, homeowners, and non-residential buildings (known as FEMA P-259, P-312, and P-936, respectively, form the basis for the Flood Retrofitting course delivered by nationally recognized subject-matter experts at EMI.

But Building Science's mission goes well beyond these examples, as it develops many other publications, guidance materials, tools, technical bulletins, and recovery advisories that incorporate the most up-to-date building codes, floodproofing requirements, seismic design standards, and wind design requirements both for new construction and for the repair and retrofitting of existing buildings. The staff also lends considerable ongoing technical support towards the development, update, and adoption of model building codes and standards that incorporate hazard resistance and building resilience.

Three recent building science-related products are of particular interest to CRS communities.

Quick Reference Guide: Comparison of Select NFIP & Building Code Requirements for Special Flood Hazard Areas [www.fema.gov/library/viewRecord.do?id=5701] is an 8-page guide that highlights the similarities and differences between the National Flood Insurance Program (NFIP) minimum requirements and the requirements of the International Code Series (I-Codes) and ASCE 24, Flood Resistant Design and Construction, a standard referenced by the I-Codes. Among the features contrasted are foundation types, lowest floor elevations, enclosures below elevated buildings, and utilities requirements within the NFIP and I-Codes for most residential and commercial buildings.

CodeMaster for Flood Resistant Design (2012) is an easy-to-use, 8-page desk reference that identifies the flood provisions in the 2009 and 2012 International Building Code® (IBC®) and International Residential Code® (IRC®), as well as the flood requirements of American Society of Civil Engineers (ASCE) standards 7-05, 7-10, and 24-05. The CodeMaster helps designers ensure that they incorporate the flood-resistant provisions of these codes and standards. There are sections on preliminary considerations and design process, key flood terminology, a 12-step process to incorporate flood resistance in the design of a building, an example showing the 12-step process being executed, and information on additional FEMA mitigation resources related to flood-resistant design. The guide can be purchased from the International Code Council [http://shop.iccsafe.org/].

Reducing Flood Losses through the International Codes (4th Edition) introduces a Model Code-Coordinated Ordinance that communities participating in the NFIP can rely on to form the basis of their floodplain management practices. Developed by the International Code Council in cooperation with FEMA, this guide provides tools for state and local officials to integrate the I-Codes into current floodplain management regulatory processes. The guide also identifies pertinent questions that should be answered in the context of each state's or community's existing statutes and codes, and offers examples of how the I-Codes can be modified to incorporate even higher standards to increase resistance to flood damage. Available at www.fema.gov/media-library/assets/documents/96634.

A newer initiative of the Building Science Branch is the pursuit of outreach strategies for communicating building science issues to a wide array of stakeholders. Some flyers and fact sheets have been developed, and coordination with many organizations of building professionals is ongoing.

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Building Science Branch (cont.)

Recent inroads have also been made incorporating Building Science into "discovery meetings" of the RiskMAP process, with a particular emphasis on discussing disaster-resistant building codes, hazard-resistant design, and construction and engineering guidance for mitigation/HMA projects. A key resource in this effort has been the *Building Science Toolkit* (FEMA P-950 CD) found at www.fema.gov/media-library/assets/documents/92819.

Check at the Building Science website [www.fema.gov/building-code-resources] often to see what's new. Or, add Building Sciences to your preferences on gov.delivery. ≡ ≡ ≡

Some resources of FEMA's Building Science Branch
(click to access)

- Building Code Resources
- *Coastal Construction Manual*
- Mitigation Assessment Team Program
- Catalog of FEMA Wind, Flood and Wildfire Publications, Training Courses and Workshops
- Mitigation Assessment Team reports
- NFIP Technical Bulletins
- Rebuild Smarter and Stronger: Information and Guidance on Building Safer
- Substantial Damage Estimator (SDE)
- The FEMA How-To Series: Protect Your Home or Business

The CRS — Questions & Answers

— Answers to actual questions posed by CRS communities —

Documenting Inspection and Maintenance of Ponds

Q *To document our city's Activity 540 drainage system maintenance of detention ponds, the crews consider all of the components of a pond (outlet, grate, inflow, pan, landscaping, etc.) to be a single element. These are grouped and labeled with the pond name in our software, and the individual components of the pond are itemized on the maintenance checklists. We do not see the need to break each pond down into its separate components in the database or on the map. Is this acceptable for CRS documentation?*

A Yes, it is. Remember that ponds are no longer part of channel debris removal (CDR) under the CRS. Instead, their maintenance is now scored under storage basin maintenance (SBM). So the scoring for pond inspection/maintenance is by pond, and is not based on the individual components of the pond. We assume that when you inspect a pond or other detention facility you inspect the entire facility. Your system is perfectly acceptable and works well.

So, for example, for the impact adjustment, if you have 100 public and private ponds within the city and 50 of them are included in the city's annual (or more frequent) inspection effort, the impact adjustment becomes 50/100 or 0.50. Note that this means the same 50 ponds are inspected routinely and the remaining 50 ponds are not part of the city's inspection program. It DOES NOT mean that, in a given year, the city only reaches half of those that need inspection.

For the verification visit, the ISO/CRS Specialist will need a list of all the ponds and a map. He or she will select a random sample of them for both an office review and a field review, just like for CDR. An ideal package would include a spreadsheet listing all the SBM ponds and their locations, accompanied by a map (pdf format would be fine) correlating the pond names to the map. ≡ ≡ ≡

FloodSmart PSA Boosts Flood Risk Awareness

FloodSmart resources can help communities earn CRS credit under Activity 330 (Outreach Projects) or Activity 370 (Flood Insurance Promotion).

FloodSmart, the marketing and education campaign of the National Flood Insurance Program (NFIP), has developed a public service announcement (PSA) campaign to educate the American public about their flood risk. The TV, radio, and print PSAs help dispel a common misperception among consumers—namely, that just because they have not experienced a flood before, they are not at risk for flooding in the future.

The PSAs were distributed in May to coincide with the start of the 2014 Atlantic and Gulf of Mexico hurricane season. Airing or running them in your community could be a great conversation starter for exploring flood risk and flood insurance with local residents, especially in areas where flood risk is not perceived as high. It is important to note that the PSAs must be placed in free, donated time and space.

The integrated PSA campaign leverages assets across the following media:

- TV—Animated 60- and 30-second PSAs tell the story of a family that moves into a new home and is unprepared when a storm causes a flash flood, and it does so in a child's "storybook" style.
- Radio—The same family's story is told by a young boy, whose voice and innocent retelling convey to listeners that a flood can happen anywhere and that they should learn about their risk.
- Outdoor—Billboards feature an image of a family home that has been damaged by a flood. A child's teddy bear lies on the floor, signifying the importance of home.

Consider reaching out to the public service directors of your local radio and TV stations to discuss the importance of airing the PSAs. Take this time to remind them that flooding is the United States' number-one natural disaster, and that in the past five years, all 50 states have experienced floods or flash floods. Each PSA features a call to action for people to learn about their own flood risk and to visit FloodSmart.gov for more information.

To view the PSAs, go to FloodSmart.gov/OurHome. If you would like copies of the files, contact FloodSmart Program Manager Mary Jo Vrem at MaryJo.Vrem@fema.dhs.gov.

Besides PSAs, FloodSmart offers other free tools and resources to help with outreach throughout the year. These materials can be accessed on the FloodSmart Community Resources page. One of the more popular resources is the Cost of Flooding tool. Use it in presentations or on websites to provide an interactive look at how much damage is caused by flood waters. This can be a great visual reminder that only a few inches of water can cause tens of thousands of dollars in damage.

FloodSmart also helps make it easier to engage with residents on social media. Find suggested posts focused on seasonal flood risk in the Community Resources page.

Use these and other FloodSmart resources in your outreach activities to help spread the word about flood risk and flood insurance. If you download the PSAs and other materials and use them each year, you can earn Community Rating System credit under Activity 330 (Outreach Projects) and/or Activity 370 (Flood Insurance Promotion). If your community website's flood information home page links to these FloodSmart pages, you can also receive website credit under Activity 350 (Flood Protection Information).

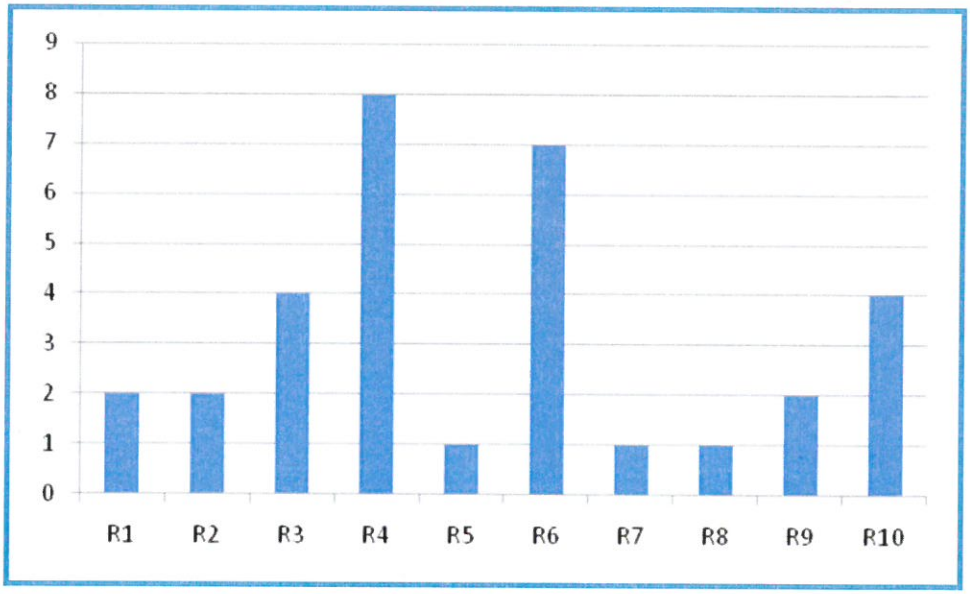
If you need more help in finding or using any of these resources, contact FloodSmart at info@femafloodsmart.com. ≡ ≡ ≡

Debbie's Dish ..... *on CRS Users Groups*

Debbie Cahoon Vascik, CFM
Users Groups Liaison

Hearing Voices

Strange title for a column, right? I promise it will make sense in a few minutes, but first, I am happy to report that a few more CRS Users Groups have popped up around the country for a total of 34 groups. The graph shows the number of Users Groups per FEMA region.



If there's any competition for who will have the most Users Groups, it's between Region 4 and Region 6. I challenge the rest of the regions to give them a run for their money. It's important to remember that CRS Users Groups need not be formally organized and structured to be successful. CRS communities simply need a means to educate themselves and others about the CRS while working towards improving their own programs. From what I've seen, though, forming the group isn't the hard part; it's keeping up with it that can be a challenge . . . which leads me to how the title of this column pertains to a CRS audience.

Keeping CRS Users Group meetings fresh and relevant is not always easy. Once the logistics are worked out and the group is up and running, it can sometimes be a struggle to keep up the momentum. The transition to the 2013 *CRS Coordinator's Manual* gave us all a lot to work with in the beginning, but now that it has become the new norm, we have to think outside the box for new ideas. How about listening to a few new voices? Let me explain.

Let's use a specific CRS activity for example—Activity 520, Acquisition and Relocation. An obvious speaker for your CRS Users Group meeting would be someone from your state hazard mitigation office, i.e., the person who reviews and awards hazard mitigation grants for buyouts for structures located in the floodplain, repetitive loss areas, or other at-risk areas of the

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Debbie's Dish (cont.)

community. It would also be beneficial for communities to hear tips on how to write successful grant applications. Perhaps another speaker option would be to hear from the other side of the fence, i.e., a CRS Coordinator from a high-scoring community in this activity, to give perspective on what it takes to submit a successful grant application, such as gathering data, assembling documentation, writing the application, educating elected officials and the public on how the grant would benefit the community.

Now how about hearing another voice? Perhaps the voice of a homeowner whose house had been flooded in the past five events, who had made several claims with the NFIP, and who recently moved across the city because the house was purchased in a buyout project. How about inviting that homeowner to your next CRS Users Group meeting and hearing him or her describe that personal experience? You may learn about ways in which your community could improve the process for next time to ensure that homeowners are not inconvenienced any more than necessary, or how to involve the public from the beginning to ensure that buyout applicants are fully involved and knowledgeable about the process. You may not be aware of how "this side" of the CRS activity operates so it may be worth hearing and sharing.

Consider another CRS activity—Activity 430, Higher Regulatory Standards. Many meetings could be spent exploring this one activity, but let's narrow it down to a few elements. For freeboard, let's hear from local builders who can explain the additional costs of elevating from one foot to two feet. Or let's listen to a local citizen describe how a recent elevation project helped save him or her thousands of dollars in flood damage that had been suffered in the past. Maybe the voice of an insurance adjuster talking about post-event damage estimations would mean something for communities considering a lower substantial damage threshold or a cumulative substantial improvement clause in their ordinance.

First-person accounts are always great attention-getters. People prefer hearing real life experiences and details to hearing generalizations. They like to learn how the changes they make affect other people. What better way to prove the benefits of the CRS than by hearing from the people who are directly affected?

I challenge the CRS Users Groups to think about the other voices—those of homeowners, business owners, etc.—and how listening to them can improve your floodplain management programs. The people may not always say what you're hoping they'll say, but their voices will speak volumes about why you're working so hard to protect their community. ≡ ≡ ≡

Register Now for Rhode Island-based CRS Training

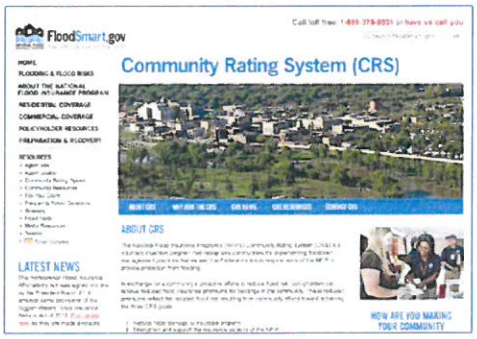
There are still 10 seats available in the field-deployed version of "The Community Rating System," the all-purpose training course about the CRS (L278).

The class is being sponsored by the Rhode Island Emergency Management Agency, and will be held Monday through Thursday, 8:00 am to 5:00 pm, on October 20–23, 2014, in Warwick, Rhode Island. The course description and prerequisites are the same as those listed under the Training Opportunities section of this newsletter *[page 8]*.

This is an opportunity to orient new participants at the state and/or local level with the whole CRS. Completion of the course earns 12 CECs (continuing education credits) for Certified Floodplain Managers. A registration form and additional information can be obtained by emailing Samantha Richer at Samantha.Richer@ema.ri.gov. ≡ ≡ ≡

Online Resources

At FloodSmart.gov



Always keep an eye on the CRS pages and the rest of the helpful segments of the FloodSmart website [https://www.floodsmart.gov/floodsmart/pages/crs/community_rating_system.jsp]. This is the site to which you should refer people new to the CRS who don't need the full technical details posted elsewhere. It's geared toward elected officials, newly hired CRS Coordinators, and the public.

At CRSresources.org

Remember that www.CRSresources.org is continuously updated with new CRS materials. All documents referred to in the *CRS Coordinator's Manual* are being posted as soon as they are available. If you cannot find a piece of information or document, please notify your ISO/CRS Specialist or NFIPCRS@iso.com. Here are some recent additions to the website.

- **Webinar Schedule**—under the Training & Videos tab at www.CRSresources.org/training there is a list of all the CRS webinars scheduled to date, along with registration information.
- The last issue of the ***NFIP/CRS Update*** newsletter, in case you missed it (June/July 2014), can be found at www.CRSresources.org/100-2. ≡ ≡ ≡

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 2013 *Coordinator's Manual*, the FEMA Elevation Certificate, or any other activity, contact your ISO/CRS Specialist. The following one-hour topical webinars are on the calendar, and others can be scheduled. Many will be recorded, so they can be accessed later. Registration is free, but required, as space is limited. Some courses provide continuing education credits for Certified Floodplain Managers (CFMs). See www.CRSresources.org/training.

All webinars begin at 1:00 pm EST / 10:00 am PST.

- Introduction to the CRS— October 21, 2014; December 16, 2014
- Preparing for a Verification Visit with the 2013 *Coordinator's Manual*— November 18, 2014

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Training Opportunities (cont.)

- Developing Outreach Projects under Activity 330— October 22, 2014
- Activity 610 (Flood Warning and Response) — November 19, 2014
- Developing a Program for Public Information under Activity 330 or a Coverage Improvement Plan under Activity 370, and Using FloodSmart Tools— December 17, 2014.

Some of the other webinars anticipated in 2014 and 2015 are

- CRS Credit for Mapping and Regulations: The 400 Series
- CRS Credit for Flood Damage Reduction: The 500 Series
- The 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.

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 27–30, 2015;
  ..... July 27–30, 2015; August 31—September 3, 2015

  NOTE: The three 2015 classes listed above are not yet open for registration, because the dates have not been finalized.

  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.

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Training Opportunities (cont.)

- **Hazus-MH for Flood** (E172) ..... December 1–4, 2014
- **Unified Hazard Mitigation Assistance Program: Quality Applications** (E212) ..... March 2–5, 2015
- **Managing Floodplain Development through the NFIP** (E273) ..... March 9-12, 2015

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

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 up to 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 Home Town

In 2015 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 2013 *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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