



# NFIP/CRS UPDATE

*August 2009*

## What Best Practices can you Share?

Communities that are successful in the Community Rating System tend to engage in numerous “best practices” that maximize their resources of staff and funds—whatever they may be—and keep their floodplain managements programs moving and improving.

To help all CRS communities, and other communities that are considering joining, the CRS is compiling a “compendium of best local practices” for managing local CRS activities. The compendium will consist of new practices and lessons learned. The idea is to collect these nuggets of information continuously, so that the compendium can be updated when it becomes necessary.

Your own Best Practices are needed to make the compendium useful and realistic. Each issue of the *NFIP/CRS Update* newsletter in the next year will feature one of the Best Practices, and ask you to contribute your anecdotes, case studies, lessons learned, photos, or other information about that practice that can help other communities. Please send examples from your community to [NFIPCRS@iso.com](mailto:NFIPCRS@iso.com). Assistance will be available in writing up a description of your Best Practice.

The first Best Local Practice is “Have the right attitude.” Below is a tentative description of that Best Practice, with an example from Lincoln, Nebraska, but more examples are needed for the compendium. Send your ideas to [NFIPCRS@iso.org](mailto:NFIPCRS@iso.org).

### **Best Practice #1—Have the Right Attitude**

One factor that separates communities that are effective in the CRS from those that are struggling is the attitude of the local residents, community staff, and elected officials toward floodplain management. Communities that are concerned about preventing and reducing future flood losses usually devote more resources to CRS-credited activities, and they also see better results. On the other hand, communities that are in the CRS just to obtain the insurance savings or because the previous local administration had joined the program, often struggle to do everything they committed to do when they applied.

Attitude is a hard thing to change. It is usually beyond the reach of the staff and instead reflects the priorities of the elected leadership. History has shown that, unfortunately, people’s attitudes change

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## Do you have Best Practices to Share? —continued from front page

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most quickly and most permanently when their community endures a serious flood—then the reasons for the floodplain management activities become painfully evident to everybody.

A less destructive way to change attitudes in your community is to introduce the No Adverse Impact flood-plain management concept. With the NAI approach you can show that there are very good reasons to go above and beyond the minimum requirements of the NFIP; thus, the CRS credit is just a little gravy to recognize effective local programs. The NAI concept and other reasons for taking floodplain management seriously can be presented as part of a good floodplain management planning process. Accordingly, a well conceived and supported floodplain management plan (pursuant to Section 510 in the *CRS Coordinator's Manual*) can change attitudes.

### How Lincoln, Nebraska, used Education to Change Attitudes



In 2001, the Mayor of Lincoln, Nebraska, appointed a Floodplain Task Force to “formulate recommendations regarding the development of permanent floodplain standards that address the natural functions of floodplains and reduction of future flooding hazards.” The 16 members of the Task Force represented a broad cross-section of interests from throughout the community.

Over the course of two years, the members of the Task Force worked to educate themselves—on behalf of the interests they represented—about the many aspects of Lincoln’s flooding, its interaction with growth and development, and the various management approaches that could help protect the area’s floodplain resources and minimize future damage and disruption.

Meetings featured a variety of guest speakers with different areas of technical expertise. The Task Force often worked in two or three small groups at its meetings to maximize participation, allow full exploration of different aspects of floodplain management, and balance discussions. A polling process allowed each member to agree, disagree, or offer specific word changes to draft recommendations. The conversations regarding specific statements proved very useful in working toward consensus or in clarifying positions outside the consensus. Professional facilitators helped guide the educational effort.

The end result was an ordinance for Lincoln’s New Growth Areas that follows the Association of State Floodplain Managers’ No Adverse Impact approach and includes several regulatory standards higher than the NFIP criteria. Some of its standards are a no-net-rise/compensatory storage requirement, stream buffer rules, and incentives for cluster developments.

Did the Lincoln education-and-participation approach change attitudes about preventing flood damage? In the five years since the ordinance was passed, no challenges have been made to its provisions. In fact, certain provisions of the ordinance, in particular the requirements to use best available data, have been extended to apply to existing urban areas as well as to the developing ones.

The Task Force’s report is at <http://www.lincoln.ne.gov/city/pworks/watrshed/mfptf/reports/final>.

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#### Statement of Purpose

The *NFIP/CRS Update* is a publication of the National Flood Insurance Program’s Community Rating System. Its purpose is to provide 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 free to local officials, state officials, consultants, and others who want to be on the mailing list. Communities are encouraged to copy and/or circulate the *NFIP/CRS Update* and to reprint its articles in their own local, state, or regional newsletters. No special permission is needed.

To become a subscriber or to suggest a topic that you would like addressed, contact

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## Your Local Representatives on the CRS Task Force

The Community Rating System Task Force is the focal point for all discussions about the CRS. It is made up of 18 experts from several disciplines related to the CRS, including representatives from FEMA, professional associations, the insurance industry, and others. An important contribution to the Task Force is made by the three members who represent the CRS communities. Those representatives come from different parts of the country and from different types of communities, but they share a commitment to shaping and improving the CRS and to responsible management of floodprone areas.

**Shannon Watson** is the Assistant Manager of the Planning Group (and former CRS Coordinator) of unincorporated Harris County, Texas. She is a Registered Professional Engineer and a Certified Floodplain Manager. Harris County is the third-largest repetitive flood loss community, and is a CRS Class 8. Because of its flat topography and climate, Harris County is susceptible to both riverine and coastal flooding.

**Maria Angeles** is an Associate Civil Engineer and CRS Coordinator for the City of San Jose, California (population 1,006,892). She is a Registered Professional Engineer and Certified Floodplain Manager. San Jose, a CRS Class 7 community, is situated about 50 miles south of San Francisco. Two major waterways, the Guadalupe River and Coyote Creek, make the city susceptible to riverine flooding.

**Eugene (Gene) Henry** is a Hazard Mitigation Manager with Hillsborough County, Florida, a CRS Class 5 community that lies on the Gulf Coast and is subject to both coastal and riverine flood hazards. Gene is a member of American Institute of Certified Planners (AICP) and a Certified Floodplain Manager. He has been involved in administering programs in hazard mitigation, floodplain management, post-disaster redevelopment planning, permitting and construction, land use allocation, and capital improvements. In 2002, Gene was named the ASFPM's Larry Johnston Local Floodplain Manager of the Year.

If you have any concerns about the CRS that you would like to have addressed by the CRS Task Force, please pass them on via your community representatives:

- Shannon Watson— [Swatson@eng.hctx.net](mailto:Swatson@eng.hctx.net)
- Maria Angeles— [Maria.angeles@sanjoseca.gov](mailto:Maria.angeles@sanjoseca.gov)
- Gene Henry— [Henrye@hillsboroughcounty.org](mailto:Henrye@hillsboroughcounty.org)

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## Up-to-date List of NFIP State Coordinators is Ready

An updated list of state contacts for the National Flood Insurance Program has been posted on the website of the Association of State Floodplain Managers. You can get the name, address, phone, and email of the NFIP Coordinator in your state at <http://www.floods.org/index.asp?menuID=274>.

While you are there, check out the remodeled ASFPM website. It's full of facts and links and vital news about floodplain management. Also, the new site is easier to navigate and pretty to look at.

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## Get CRS Credit for High Water Mark Signs

Since 2006, the National Weather Service has been installing signs in prominent locations within communities that have experienced severe flooding. The signs show the level of the flood waters during a particular event in the past, and are intended to raise awareness and to remind people of the dangers of flooding. The high-water-mark signs are posted in visible locations such as on the wall of a centrally located building downtown, rather than near a rarely visited riverbank.

Under this program, service hydrologists from local NWS offices coordinate with local officials to choose the best locations for the signs. The U.S. Geological Survey provides historical data and aids with surveying for the locations of the high water mark signs.

Communities that post notices or signs indicating the high water marks of past floods can receive CRS credit points for an “additional outreach project” (OPA), as described in Section 331c.1 of the *Coordinator’s Manual*. These signs from the NWS are one of several ways to obtain that credit.



The High Water Mark Website contains a map of where the NWS signs are posted, photos of the sites, and information about how to get a sign posted in your neighborhood. Visit it at [http://www.weather.gov/os/water/high\\_water/](http://www.weather.gov/os/water/high_water/).

—excerpted from *Aware*, July 2009, p. 3

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## Possible Confusion on NFIP Biennial Reports

In the last issue of this newsletter, it was noted that in April FEMA sent Biennial Report forms to all communities participating in the National Flood Insurance Program, and that reminders are being sent to communities that have not yet responded. All CRS communities must complete and return the Biennial Report form in order to retain their CRS classifications. HOWEVER, the local CRS coordinator is not necessarily responsible for completing the Biennial Report Form.

Each community’s Biennial Report was addressed to either the Chief Executive Officer or the designated Floodplain Administrator as listed in the records in the NFIP’s official database, the Community Information System. All local CRS coordinators should contact the appropriate local official to be sure that the Biennial Report was completed and submitted to FEMA as requested. Any local CRS coordinator who is not sure who the local Biennial Report recipient is can get that information from his or her ISO/CRS Specialist. Contact information for the ISO/CRS Specialists was published in the April *NFIP/CRS Update*.

## How do you use Computerized Elevation Certificates?

Communities can receive CRS credit for maintaining elevation certificates in computer format (ECCF). In the past, the CRS has provided free software to enter elevation certificate data on a personal computer. However, it has proven expensive and time-consuming to keep the software properly updated, so the CRS is considering discontinuing this credit.

Some communities use the software for other purposes—not just to receive CRS credit. Do you use the computerized elevation certificates to sort your elevation certificates by address, or by building type? Is the computerized format useful for other purposes?

Please share how you use the elevation certificate software by emailing [NFIPCRS@iso.com](mailto:NFIPCRS@iso.com).

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## Link to StormSmart for some Good Ideas

The StormSmart Coasts Network is a web resource dedicated to helping decisionmakers in coastal communities address the challenges of storms, flooding, sea level rise, and climate change—but many of the lessons are equally appropriate for inland communities. More than just a website, this network of state and local sites gives coastal decisionmakers a definitive place at which they can find and share the best resilience-related resources available, and also provides tools for collaboration.

### Massachusetts the First StormSmart Site

The StormSmart Coasts network began with a Coastal Services Center Coastal Management Fellowship, funded by the National Oceanic and Atmospheric Administration, in the Massachusetts Office of Coastal Zone Management. Massachusetts' attractive and informative website provides a menu of tried-and-true tools for successful coastal floodplain management. Among the topics addressed are No Adverse Impact floodplain management, legal issues, funding for mitigation and other activities, and useful publications. There are technical assistance offerings on hazard identification and mapping, planning, regulations and development standards, mitigation and shoreline protection, infrastructure, emergency services, and education and outreach.

Three Massachusetts CRS communities—Chatham (CRS Class 8), Quincy (CRS Class 7), and Scituate (CRS Class 8)—are featured in the “case studies” section of that state’s website.

Chatham’s zoning bylaw designates “conservancy districts” encompassing all land in the town’s mapped 100-year floodplain. Construction of a residence is prohibited in conservancy districts. Chatham’s bylaw received attention when the owner of a lot in a conservancy district sued the city after he was denied a permit to build a home there. The lawsuit made its way to the Massachusetts Supreme Court, which upheld Chatham’s bylaw, ruling that “restricting residential development within the path of floodwater, the flood plain, is a direct, logical, and reasonable means of safeguarding persons and property from those hazards occasioned by a flood . . .”

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## StormSmart Coasts Network —continued from page 5

Both Quincy and Scituate have made good use of FEMA and other funds to mitigate floodprone properties. Densely developed Quincy has retrofitted residences by elevating the utilities—an approach that works well there because it usually does not add to the building’s “footprint,” an important consideration in fully-built-up watersheds. Scituate has worked to mitigate the risk to its many repetitive flood loss properties, usually by elevating the entire structure. Most of those properties are susceptible to open ocean waves and can be damaged in even moderate storms.

Visit Massachusetts’ StormSmart Coasts website at <http://www.mass.gov/czm/stormsmart/>.

### Other States follow Suit

Mississippi and Louisiana have recently “gone live” with their StormSmart websites, with the Gulf of Mexico Alliance as a co-sponsor with NOAA. Both sites feature information about funding opportunities and advice for “before,” “during,” and “after” storms, all tailored to their specific coastal environments and socioeconomic situations. Like the Massachusetts site, they supply legal background on the No Adverse Impact approach, a place to sign up for the StormSmart newsletter, a window on current storm activity, and—coming soon—a national blog.

StormSmart websites are expected to be ready soon for Alabama, Connecticut, Florida, Maine, New Hampshire, Rhode Island, and Texas. The plan is that all coastal states (including those bordering the Great Lakes) eventually will have individual websites and be linked to the StormSmart network.

All the states’ websites can be reached via <http://stormsmartcoasts.org/>.

## Watch out for that Datum Conversion

CRS communities are reminded that the new FEMA elevation certificate requires that more attention be paid to consistency among the elevations reported. All elevations on the certificate, including those for items C2.a—h, must use the same datum as that used for the base flood elevation. If the field survey data are based on a datum different from that used for the base flood elevation (Item B11), then the datum used must be indicated in Item C2. All three items at the beginning of C2 must be completed: “Benchmark Utilized,” “Vertical Datum,” and “Conversion/Comments.”

What’s important is that all the elevation figures given in Item C2 be converted to the same datum as used in Item B11. It is not sufficient to simply give the elevation in Item B9 and then enter unconverted elevation figures into Items C2.a—h.

A two-page handout, *Converting NGVD to NAVD*, may be helpful in understanding the differences among elevation datum planes. It is free in pdf format from your ISO/CRS Specialist or [NFIPCRS@iso.com](mailto:NFIPCRS@iso.com).

U.S. DEPARTMENT OF HOMELAND SECURITY  
Federal Emergency Management Agency  
National Flood Insurance Program

**ELEVATION CERTIFICATE**  
Important: Read the instructions on pages 1-9.

OMB No. 1990-0008  
Expires March 31, 2012

**SECTION A - PROPERTY INFORMATION**

A1. Building Owner's Name \_\_\_\_\_ Fair Insurance Company Use:  
Policy Number \_\_\_\_\_

A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. \_\_\_\_\_ Company NAIC Number \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ ZIP Code \_\_\_\_\_

A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) \_\_\_\_\_

A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) \_\_\_\_\_ Horizontal Datum:  NAD 1927  NAD 1983

A5. Latitude/Longitude Lat. \_\_\_\_\_ Long. \_\_\_\_\_

A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.

A7. Building Diagram Number \_\_\_\_\_

A8. For a building with a crawlspace or enclosure(s): \_\_\_\_\_ sq ft AB. For a building with an attached garage \_\_\_\_\_ sq ft

a) Square footage of crawlspace or enclosure(s) \_\_\_\_\_ sq ft a) Square footage of attached garage \_\_\_\_\_ sq ft

b) No. of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade \_\_\_\_\_ b) No. of permanent flood openings in the attached garage within 1.0 foot above adjacent grade \_\_\_\_\_

c) Total net area of flood openings in AB.b \_\_\_\_\_ sq ft c) Total net area of flood openings in AB.b \_\_\_\_\_ sq ft

d) Engineered flood openings?  Yes  No d) Engineered flood openings?  Yes  No

**SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION**

B1. NFIP Community Name & Community Number \_\_\_\_\_ B2. County Name \_\_\_\_\_ B3. State \_\_\_\_\_

B4. Map/Panel Number \_\_\_\_\_ B5. Suffix \_\_\_\_\_ B6. FIRM Index Date \_\_\_\_\_ B7. FIRM Panel Effective/Revised Date \_\_\_\_\_ B8. Flood Zone(s) \_\_\_\_\_ B9. Base Flood Elevation(s) (Zone(s) AD, use base flood depth) \_\_\_\_\_

B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9:  
 FIS Profile  FIRM  Community Determined  Other (Describe) \_\_\_\_\_

B11. Indicate elevation datum used for BFE in Item B9:  NGVD 1929  NAVD 1988  Other (Describe) \_\_\_\_\_

B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)?  
Designation Date: \_\_\_\_\_  CBRS  OPA

**SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)**

C1. Building elevations are based on:  Construction Drawings\*  Building Under Construction\*  Finished Construction

\*A new Elevation Certificate will be required when construction of the building is complete.

C2. Elevations - Zones A1-A30, AE, AH, A (with BFE), VE, V1-V30, V (with BFE), AR, ARA, ARAG, ARU1-A30, ARUH, ARVQ. Complete Items C2.a-h below according to the building diagram specified in Item A7. Use the same datum as the BFE.

Benchmark Utilized: \_\_\_\_\_ Vertical Datum: \_\_\_\_\_ Conversion/Comments: \_\_\_\_\_

a) Top of bottom floor (including basement, crawlspace, or enclosure floor) \_\_\_\_\_ feet  meters (Puerto Rico only)

b) Top of the next higher floor \_\_\_\_\_ feet  meters (Puerto Rico only)

c) Bottom of the lowest horizontal structural member (V Zones only) \_\_\_\_\_ feet  meters (Puerto Rico only)

d) Attached garage (top of deck) \_\_\_\_\_ feet  meters (Puerto Rico only)

e) Lowest elevation of machinery or equipment servicing the building \_\_\_\_\_ feet  meters (Puerto Rico only)

f) Lowest adjacent (finished) grade next to building (LAG) \_\_\_\_\_ feet  meters (Puerto Rico only)

g) Highest adjacent (finished) grade next to building (HAG) \_\_\_\_\_ feet  meters (Puerto Rico only)

h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support \_\_\_\_\_ feet  meters (Puerto Rico only)

**SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION**

This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information. I certify that the information on this Certificate represents my best efforts to preserve the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.

Check here if comments are provided on back of form. Were latitude and longitude in Section A provided by a licensed land surveyor?  Yes  No

Certifier's Name \_\_\_\_\_ License Number \_\_\_\_\_

Title \_\_\_\_\_ Company Name \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP Code \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_ Telephone \_\_\_\_\_

FEMA Form 81-31, Mar 09 See reverse side for continuation. Replaces all previous editions.

# Opportunities for NFIP and CRS Training

## Courses at the Emergency Management Institute

FEMA's Emergency Management Institute (EMI) conducts courses on floodplain management and CRS-related topics. These are oriented to local building, zoning, planning, and engineering officials. Tuition is free for state and local government officials and travel stipends are available. Call the training office of your state emergency management agency, see <http://training.fema.gov/>, or call EMI at (301) 447-1000.

Here's the schedule for EMI's week-long classes of interest to CRS communities. For more information on these courses, see <http://www.training.fema.gov/EMICourses/EMICourse.asp>.

- **The Community Rating System (E278)** April 19–22, 2010; June 14–17, 2010; August 9–12, 2010  
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 3 years of experience specifically related to floodplain management.  
  
The Community Rating System course is also offered at other sites upon request. "Remote" courses scheduled to date include  
  - Pasadena, Texas, (FEMA Region 6), February 8–11, 2010. For information, contact Debbie Cahoon at (281) 895-6555 or [Debbie.cahoon@twdb.state.tx.us](mailto:Debbie.cahoon@twdb.state.tx.us).
  - Vicinity of Portland, Oregon (FEMA Region 10), July 12–15, 2010. For information, contact Christine Shirley, CFM, at (503) 373-0050 x250 [christine.shirley@state.or.us](mailto:christine.shirley@state.or.us).
- **Managing Floodplain Development through the NFIP (E273)** November 30—December 3, 2009; March 22–25, 2010; May 3–6, 2010, August 23–26, 2010  
  
E273 is also field deployed periodically. Contact your State NFIP Coordinator for more information. Find your State Coordinator at <http://www.floods.org/index.asp?menuID=274>.
- **Advanced Floodplain Management Concepts (E194)** July 26–29, 2010
- **Advanced Floodplain Management Concepts II (E282)** December 7–10, 2009
- **Basic HAZUS Multi-Hazards (E313)** December 7–10, 2009; March 12–15, 2010; July 12–15, 2010
- **Advanced HAZUS Multi-Hazards for Flood (E172)** (prerequisite: E313) January 4–7, 2010; July 26–29, 2010
- **HAZUS Multi-Hazards for Risk Assessment (E296)** August 2–5, 2010
- **Residential Coastal Construction (E386)** August 9-12, 2010

Under the 2007 *CRS Coordinator's Manual*, five points are provided under Section 431.n, Staffing (STF), for each member of a community's floodplain permit staff who graduates from courses E194, E273, E278, E282, or E386. The maximum credit for training under Section 431.n is 25 points.

The CRS recently experimented with a “webinar” on the **FEMA Elevation Certificate**, presented by ISO/CRS Specialist Linda Ryan and hosted by the Idaho Department of Natural Resources. It turned out to be a successful avenue for getting additional instructions out to communities, and can be offered again upon request. If you are interested in a webinar, contact your ISO/CRS Specialist.

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