

## DRF & Mitigation Planning Grants Funding Shortage

FEMA Administrator Craig Fugate recently sent a letter to the Chairman of the Appropriations Committee, Subcommittee on Homeland Security regarding a request to add an additional \$1.5 billion dollars for FEMA's Disaster Relief Fund (DRF). In his letter, Mr. Fugate stresses that these additional funds are essential to ensuring the Nation is ready and able to respond to any catastrophic events or disasters.

A lack of DRF funds has and will continue to impact the implementation of mitigation across the country. Many projects are currently on hold awaiting appropriation of DRF funds, and this problem will only continue to get worse without this additional funding. Enclosed with Mr. Fugate's letter is a list of the cost of all projects currently waiting for DRF funding broken down by state, demonstrating that there is already a large backlog of projects waiting for funding.

You can read the full letter sent by Craig Fugate at:

[http://www.floods.org/PDF/Letters/fugate\\_senate\\_drf\\_letter\\_byrd.pdf](http://www.floods.org/PDF/Letters/fugate_senate_drf_letter_byrd.pdf)

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Submit your own items or suggestions for future topics to column editor Rebecca Quinn, CFM, at [rcquinn@earthlink.net](mailto:rcquinn@earthlink.net). Comments welcomed!

### Here's Something You Might Find Interesting . . .

In my last Floodplain Manager's Notebook (March 2010), I wrote about the flood-resistant provisions of the International Code Series (I-Codes) and the advantages and challenges having those requirements part of the codes presents. I ended that column with a note that I'd highlight some of the differences between the NFIP requirements, the codes, and ASCE 24. ASCE 24, *Flood Resistant Design and Construction*, is a standard that is referenced by the codes.

But the first question might be – what is a “standard”? In the context of building codes, the Merriam-Webster Online definition that applies is “something established by authority, custom, or general consent as a model or example.” Standards are developed and published by standards organizations such as the American Society of Civil Engineers (ASCE). Perhaps the best known standard is ASCE 7, *Minimum Design Loads for Buildings and Other Structures*.

Knowing that definition is good, of course, but it doesn't really explain why a code would reference a standard. The short answer is that standards tend to deal with very specific aspects of design and construction and they are developed by committees of experts. The committees operate according to a prescribed process that assures the results are based on a consensus. One of the most important aspects of that process is the composition of the committee itself – it must be a “balanced” committee. This means that all interests

The committee that will produce the next edition of ASCE 24 will hold a “kick off” meeting on May 18 during the ASFPM Conference in Oklahoma City (1:30 pm - 5:30 pm, Huckins Room, Renaissance Hotel, across from Convention Center). The meeting is open to observers.

(designers, regulators, manufacturers, general interest) are well-represented on the committee and no single interest can control the process.

The consensus process is a formal structure that requires the committee members to submit proposals that are then voted on by the committee. After several rounds of balloting, the near-final standard is made available for public comments. Thus, the final standard can truly be characterized as a consensus document that represents the best formulation of requirements.

The consensus process also explains why ASCE 24 does not precisely line up with the NFIP regulations. It was the consensus of the committee that produced the 2005 edition, supported through the public balloting, that certain minimum requirements should be strengthened or that additional detail is necessary provide clear guidance to designers and builders. Below I'll highlight a couple of the places where ASCE 24 "exceeds" the NFIP minimums.

When you look at the flood provisions of the International Building Code (or any state or local codes that are based on the IBC), you won't see all of the details that are so familiar to floodplain managers. You won't see a provision that specifies how high lowest floors have to be elevated. You won't see a provision that calls for flood openings in enclosures below elevated buildings in A zones or breakaway walls for enclosures in V zones. (You will see familiar provisions in the International Residential Code, which applies to one- and two-family homes and townhomes. The IBC applies to all other buildings, the ones floodplain managers refer to as "non-residential.")

What you will see when you check out the building code is Section 1612, Flood Loads. Sec. 1612.4 specifies that "The design and construction of buildings and structures located in flood hazard areas, including flood hazard area subject to high-velocity wave action, shall be in accordance with Chapter 5 of ASCE 7 and with ASCE 24." Chapter 5 of ASCE 7 is where structural engineers and architects turn to understand flood loads and learn how to compute flood loads. Flood loads include hydrostatic loads (associated with the standing or slowly moving water), hydrodynamic loads (due to fast moving water), wave loads (due to breaking waves), and impact loads (caused by floating debris and ice).

Now let's take a closer look at a few requirements in ASCE 24. I recommend that floodplain managers and code officials in communities that enforce building codes that include flood provisions get a copy of ASCE 24. Short of purchasing the standard (<http://www.asce.org/>), the best source of more information is FEMA's "Highlights of ASCE 24," which you can download from the ASFPM website at: [www.floods.org/PDF/ASCE24\\_Highlights\\_1008.pdf](http://www.floods.org/PDF/ASCE24_Highlights_1008.pdf).

- **Freeboard.** ASCE 24 specifies freeboard as a function of building occupancy and flood zone. Dwellings and most other buildings have 1-ft of freeboard, and certain essential facilities have 2-3 ft. Freeboard is perhaps already the most-adopted higher standard. As reported in the August 2008 News & Views, ASFPM's information at the time indicated that more than 60% of communities that participate in the NFIP require freeboard. Additionally, I've heard the insurance folks at the NFIP say that a majority of post-FIRM buildings are "risk-rated" at BFE plus 1-ft or more.
- **Engineered Openings.** ASCE 24 provides specific requirements and procedures for calculating the size of engineered flood openings required in enclosures below elevated A zone buildings.
- **Fill.** ASCE 24 has specifications for fill, requiring fill to be stable under conditions of flooding. Compaction is specified and side slopes are to be no steeper than 1:1.5.
- **Coastal A Zone.** ASCE 24 treats the Coastal A Zone like the V Zone, requiring open foundations, designs that account for erosion and scour, and breakaway walls. All new coastal studies started after December 2008 will define the Limit of Moderate Wave Action (LiMWA),

which is the point at which wave heights drop below 18". ASCE 7, ASCE 24, and the I-Codes (and many FEMA publications) refer to the area between the V Zone boundary (3-ft waves) and 1.5-ft waves as the Coastal A Zone.

- **V Zone Foundation Design.** ASCE 24 has lots of specifications for pile design and other foundation elements, including footings, mats, rafts, grade beams, bracing, and shear walls.
- **Dry Floodproofing.** ASCE 24 limits use of dry floodproofing in several ways, including where flood velocities exceed 5 ft/sec and where conformance with certain human intervention limits cannot be achieved, including having at least 12 hours of warning time.

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## Washington Legislative Report

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### Plenty of Legislative Activity

This past month and, in particular, the past two weeks, has been a busy time for a number of issues of interest to floodplain managers. A hearing on flood insurance reform was held on April 21<sup>st</sup>, followed the next week with a mark-up of three bills including that one, a bill to add a wind and flood policy to the National Flood Insurance Program (NFIP) and a bill to create a federal catastrophe reinsurance backstop. A bill to reauthorize the Pre-Disaster Mitigation (PDM) program was marked up. A Supplemental Appropriations bill to replenish the Disaster Relief Fund (DRF) passed the House in March, but stalled in the Senate. A hearing was held on legislative proposals for a Water Resources Development Act of 2010.

All of this legislative work will continue next month with the marked-up bills likely proceeding to the House and Senate floors. Hopefully, there will be some action in the Senate on the Disaster Relief Supplemental. A Stafford Act revisions bill could be considered on the House floor and a Stafford Act reform bill is likely to be introduced in the Senate. Hearings are already scheduled for the first week in May on FEMA budget priorities with respect to disasters and on WRDA proposals. Work continues on development of levee safety (or flood risk management) legislation as well as sustainable watershed planning legislation. Mark up of FY 2011 appropriations bills could begin at any time, particularly if the House takes action on a Budget Resolution.

### The Three “Weather” Bills

Dubbed the “weather” bills by committee staff, the flood insurance, wind and flood and catastrophe reinsurance bills were all marked up on April 27<sup>th</sup> in the House Financial Services Committee and reported favorably to the House of Representatives. Each will be discussed separately here. Time for consideration on the House floor has not yet been scheduled, but action in May is likely.

#### Flood Insurance Reform Priorities Act - HR 5114

A Discussion Draft of the bill was provided to those invited to testify at an April 21<sup>st</sup> hearing about a week before the hearing took place and introduced a few days before the hearing as H.R. 5114. ASFPM was invited to testify. Executive Director Larry Larson presented the testimony which was developed with contributions from several members and is posted on the ASFPM website at: <http://www.floods.org/index.asp?menuID=334&firstlevelmenuID=187&siteID=1>. ASFPM’s testimony