A Plea to Floodplain Managers:
Reprinted with revisions from NYSFSMA News, Newsletter of the New York State Floodplain and Stormwater Managers Association, Summer 2009

Please, stop talking about “flood maps!” They are not maps of floods! The so-called “flood maps” cannot possibly depict the limits of any future flood, but the term somehow implies that they do. And when a real-world event behaves differently, people conclude that “the maps are wrong.” If they aren’t “flood maps,” what should we call them? The proper name is “Flood Insurance Rate Maps,” but insurance rating is only one of many uses. “Floodplain maps” is better. But the name I prefer is “flood hazard maps.”

And what about areas delineated on flood hazard maps? People generally recognize that if they are in “the flood zone,” they might flood (or if they're in denial they claim that the map is wrong). But they also tend to conclude that areas on the other side of that line will remain high and dry. We, of course, know that the real world consists of many flood zones with varying risks. But how can we help the public increase their understanding of this? “Special Flood Hazard Area” doesn’t exactly roll off the tongue. “Regulated floodplain” is better. I propose that we start calling the various zones depicted on the maps “flood hazard zones.”

That brings me to a more difficult question: What should we call the model flood on which our regulations and insurance requirements are based? The term “100-year flood” is widely used and widely misunderstood. Any time part of the “100-year floodplain” gets flooded, some people conclude that it must have been a “100-year flood.” And if they think they’ve already had three “100-year floods” this year, they figure that the chances of another flood are really low (so they do nothing, when they should be acknowledging that they’re in a very high hazard zone). But what can we call it? I’ve tried the “1% probability flood,” but the public doesn’t grasp that. “Base flood” also fails to convey the message. Terms I sometimes use are “regulatory flood” and “regulated floodplain.” Do you have better suggestions?

As floodplain managers, we often bemoan the fact that the public has a poor understanding of flood risks. But maybe we share the blame by using inaccurate terminology. Let’s pay more attention to words we use and what those terms imply to people who don’t understand the complex issues associated with flood hazards. A shift in terminology is a small step, but it may provide a better foundation for other efforts to improve the public’s understanding of flood risks.

Thank you,
Janet Thigpen, CFM

Submit your own items or suggestions for future topics to column editor Rebecca Quinn, CFM, at requinn@earthlink.net. Comments welcomed!

Here’s Something You Might Find Interesting . . .

In 2000, Congress passed – and the President signed – an act that more and more state and local floodplain managers are realizing will impact their jobs. But in a good way!
The Manufactured Housing Improvement Act of 2000 was passed to modernize federal requirements applicable to manufactured housing. At the time, more than 19 million Americans lived in approximately 9 million units and manufactured housing had become one of the fastest-growing segments of the housing industry. That rate has slowed considerably, dropping from an all-time high of 373,000 units shipped in 1998 to just over 81,900 units in 2009 (http://www.census.gov/const/www/mhsindex.html). Still, many NFIP communities regularly process applications for permits to place and replace units in mapped special flood hazard areas.

The Manufactured Housing Improvement Act does two key things that have bearing on floodplain management. One, it requires HUD to develop standards for the installation of new MFH units, and two, it requires HUD to develop standards for state installation programs. More details on these two elements are explained below.

HUD’s Manufactured Home Installation Standards. The Act required HUD to use a balanced consensus committee process for the development, revision, and interpretation of Federal construction and safety standards for manufactured homes, including “model” installation standards. The final rule for the installation standard was published on October 19, 2007 at 24 CFR Part 3285 Model Manufactured Home Installation Standard. It is notable that the regulations apply only the initial installation of new units.

Download the standards from ASFPM’s webpage at: http://www.floods.org/PDF/HUD_MFH_InstallationStandards_FinalRule_101907.pdf and look up other information from HUD here http://www.hud.gov/offices/hsg/ramh/mhs/csp.cfm. It’s worth running a word search of the standards (search “flood”) to see how it captures some but not all NFIP requirements.

With respect to flood hazard areas, the installation standard requires manufacturers to do one of two things. They must either clearly specify if the foundation specifications have been designed for flood-resistant considerations or if they have not been designed to address flood loads. If the specifications are designed for flood-resistance, the conditions of applicability are to be listed (velocities, depths, or wave action) and the design must be certified by a registered professional engineer or architect. If flood loads are not addressed, the instructions are to direct the installer to “obtain an alternate design prepared and certified by a registered professional engineer or registered architect for the support and anchorage.”

The installation standard specifies that in flood hazard areas, homes “must be installed on foundations engineered to incorporate methods and practices that minimize flood damage during the base flood, in accordance with the requirements of the Local Authority Having Jurisdiction, 44 CFR 60.3(a) through (e), and other provisions of 44 CFR referenced by those paragraphs.”

In addition, the standard requires outside appliances to be anchored and elevated to or above the same elevation as the lowest elevation of the lowest floor of MFHs, also requires appliance air inlets and exhausts to be elevated to or above the same elevation; and states that oil storage tanks should be anchored and elevated to or above the design flood elevation, or anchored and designed to prevent flotation, collapse, or permanent lateral movement during the design flood.

Importantly, the burden is on the installer to determine whether a home site is wholly or partly in a flood hazard area. The standard also specifies that the flood hazard zone and BFE are to be determined before an installation method is agreed upon.

State MFH Installation Programs. The Act gave the states five years to adopt an installation program that includes three key elements: (1) adoption of an installation standard (which must meet or exceed the protection provided by HUD’s model standard); (2) training and licensing of installers; and (3) an
appropriate level of inspection of installed homes. The final rule for the installation program was published on June 20, 2008 at 24 CFR Part 3286 Manufactured Home Installation Program. Download the regulations from ASFPM’s webpage at: http://www.floods.org/PDF/HUD_MFH_InstallationPgmRule_FinalRule_06-20-08.pdf and look up other information from HUD here: http://www.hud.gov/offices/hsg/ramh/mhs/mhip.cfm.

HUD sets prerequisites for installation licenses. Individuals must satisfy minimum experience levels related to installing, constructing, or inspecting manufactured homes, completion of a year of a college program in a construction-related field, or a combination of those experiences. License applicants must complete an initial 12-hour training requirement and must pass an examination. To qualify for renewal, required every three years, licensed installers must complete 8 hours of continuing education. Training instructors must meet certain requirements.

**What this Means for Floodplain Managers.** The benefits of HUD’s requirements are obvious. When installed in flood hazard areas, more manufactured homes will be installed on foundations that are specifically designed for flood conditions. And more installers will have to learn about NFIP and community requirements for flood hazard areas in order to determine appropriate foundation designs.

I think our next step is obvious: state coordinating agencies and state floodplain management associations should look into opportunities to develop training in cooperation with the state agencies that are responsible for installation programs. Doing this will get easier later this year, when FEMA anticipates releasing the updated **FEMA 85, Protecting Manufactured Homes from Floods and Other Hazards: A Multi-Hazard Foundation and Installation Guide**. The revised guidance will include some pre-engineered foundation designs that can be used within certain limitations, such as within a range of flood depths and velocities.

[RCQ]

*Return to Table of Contents*

---

**Washington Legislative Report**
Meredith R. Inderfurth, Washington Liaison
Rebecca C. Quinn, Legislative Officer

**Congress Set to Return to Packed Agenda**

After a month-long hiatus, the Congress will resume its legislative business on September 8th. Among the many major issues on the platter this fall, such as health care policy, climate change legislation, the economy and foreign policy, are also National Flood Insurance Program reauthorization, Stafford Act revisions, and sustainable watershed planning legislation. Importantly, all of the appropriations bills for FY 2010, which begins October 1, 2009, have yet to be finalized and are in various states of progress.

Following is a list of expected upcoming activity and status. Please see the August News & Views for more detailed information on these issues.