



By Rebecca Quinn, CFM

As floodplain managers, we know development in floodways designated on Flood Insurance Rate Maps has to meet a higher standard than development in floodway fringe areas. The National Flood Insurance Program defines the regulatory floodway as “the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge [pass] the base flood without cumulatively increasing the water surface elevation more than a certain height.” FEMA uses a 1-foot increase to determine where to delineate floodways.

The higher standard for floodways requires communities to prohibit encroachments in the floodway unless “it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge.” (44 CFR § 60.3(d), emphasis added) This requirement often is referred to as the “no rise” rule.

Todd Richard, floodplain manager with Findlay, Ohio and long-time ASFPM member, got in touch recently and said he’s always been told “no rise means NO RISE,” and asked me a question. I invited him to share his thoughts on floodways, no rise and emergency sandbagging, which follow.



As I watch news reports of severe flooding throughout the country, I often see teams of people toiling to pile sandbags along the banks of rivers and streams. Sometimes these emergency measures work, keeping water away from what may be large land areas that would otherwise get flooded. Being one of those floodplain managers who thinks about the rules all the time, I wonder how often those sandbag barriers are located in FEMA-designated floodways. If they are – how are they allowed? Have studies been performed to show these floodway encroachments meet the “no rise” rule?

While one community is protecting itself, what is the impact on others along the watercourse? Is the flow of water being restricted increasing flooding upstream, across the river or downstream? It sure looks to me like emergency sandbagging in floodways would likely increase flood levels and the extent of area impacted.

Why doesn’t the NFIP’s “no rise” requirement – supposedly enforced by all communities with floodways on their FIRMs – prohibit this activity in the

Important Terms

“Zone A” (or “A Zone”) is a term we all use, even though it isn’t defined in NFIP regulations. The term is used to mean two different, albeit related, things. “Zone A” is used as a collective noun to refer to all flood risk zones that start with the letter “A,” including those that have BFEs and those that don’t. Used this way, “Zone A” includes all Zones A, AE, A1-A30, A99, AR, AO and AH. We often casually use “Zone A” or “A Zone” to refer to special flood hazard areas that don’t have Base Flood Elevations. These zones are also called “approximate A zones” because they are SFHAs determined using approximate methods (some people call them “unnumbered A zones”).

“Damages” does not mean a whole lot of damage. “Damages” is a legal term meaning “compensation in money imposed by law for loss or injury.” In our line of business, nobody will be confused if we refer to what’s left behind after a flood or other natural hazard event occurs as “damages.” I probably pay attention to this because of the lasting impression of being called out on improper use of the word – in public (by a lawyer!) – about 25 years ago.

floodway? At a minimum, shouldn't the rule require an analysis to determine the impact? Suppose folks outside of the area protected by the sandbag barrier experience more severe flooding – is there a liability issue for the community doing the sandbagging?

I've asked many engineers over the years about this issue and a common reply is, "the sandbags are temporary." Well, sure, but they're temporary during a flood event! Isn't it during a flood when the presence of the sandbag barrier will affect flood conditions? After a pause, the head-scratching begins.

In Findlay, we have compensatory storage requirements in the floodway fringe area. If someone places fill in our floodplain, even sand in sandbags, we require keeping sites balanced and flood storage capacity intact.

On the other hand, we know property must be protected during a flood event, especially buildings built before Findlay joined the NFIP. To address this need, we adopted language in the city's code to regulate sandbagging. It states, "...sandbagging shall only be permitted within 3 feet of a foundation wall. Sandbags may be placed within 72 hours of a possible flood event and must be removed within 14 days after the floodwaters have subsided..." Keeping sandbags close to the building perimeter helps protect our floodplain and floodways, allowing floodwater to move freely. Findlay floods frequently, so the city stockpiles sand and sandbags – but a sign at the pick-up site reminds folks of the rules.



My real concern, however, is how other communities along the watercourse might alter their floodway with "temporary" emergency sandbagging and the impact it could have on my community. Have you thought about this if your community deploys emergency sandbags, or if your community is across, down or upstream of an area where emergency sandbag barriers are placed every time flooding is predicted?



Remember, "no rise means NO RISE." Maybe it's time for other floodplain managers to take a closer look at emergency measures deployed in their floodways and whether unintended adverse impacts are created.

Thanks to Todd Richard for contributing to this column. Submit your own items or suggestions for future topics to column editor Rebecca Quinn, CFM, at rcquinn@earthlink.net. Comments welcomed!

Job Corner

Mohave County in Arizona is hiring a flood control district engineer. A senior project engineer is need at Otak in Boulder, Colorado and combination building inspector opening is available in the Houston area. These are just a handful of the great job listings on ASFPM's job board. Visit our [job postings here](#), and if you're an employer and you want to [post an opening](#), it's FREE!