



## Floodplain Manager's Notebook

By Rebecca Quinn, CFM

In the May 2018 issue of *The Insider*, I posed a few questions and asked readers to send suggestions for topics they'd like to see me cover. I didn't get a stirring response, so I'll press on with topics that interest me and respond to questions I've answered recently in my day job.

**Question:** With the interest in more affordable housing, we're getting inquiries about garage conversions. What are the key things we need to know when someone proposes converting detached garages, attached garages and garages (enclosures) under elevated buildings?

**Answer:** The first question to ask is when was the permit for the building issued, whether it's an elevated building with enclosure below, a building to which the garage is attached, or an accessory structure (detached garage). How you review the proposed conversion work depends on the answer.

- **If the permit was issued after the community joined the NFIP**, then the community must not allow any work on the building to alter the building in ways that are contrary to (or violate) the original design and terms of the issued permit. Converting garage space (or enclosure used for building access and storage) to another use is not permitted. It doesn't matter the cost of the work—substantial improvement doesn't come into play in this scenario.
- **If the permit was issued before the community joined the NFIP** (or if the building was built before the community starting issuing permits), then the community must determine whether the work is substantial improvement (i.e., if the costs of improvements equal or exceed 50% of the market value of the building).

On a personal note, I hope we'd all discourage adding affordable housing below the BFE, even if the work does not hit the 50% substantial improvement threshold. Tenants can get NFIP flood insurance for contents, but very few tenants buy these policies. Wouldn't creating more affordable units in flood-prone areas put those who can least afford to be flooded at risk of physical and financial loss?

### Caution!

It is common—but misleading—to use the term “post-FIRM” as shorthand for compliant. Many post-FIRM buildings are 30, 40 or even nearly 50 years old (The NFIP's 50<sup>th</sup> anniversary is this year!).

Pre-FIRM and post-FIRM are insurance terms, shorthand for when buildings were built compared to the date a community joined the NFIP. That does affect the cost of NFIP flood insurance.

FEMA periodically revises FIRMs, which sometimes changes flood zones and BFEs. This means reliance on pre-FIRM and post-FIRM terminology for floodplain management purposes can lead to incorrect interpretations.

**Question:** We've seen an uptick in homeowners retrofitting to minimize future wind damage. Owners in SFHAs want to stay under the substantial improvement threshold. Can we subtract the cost of replacing old windows with impact-resistant windows and other wind retrofit measures because they're required by the code for new buildings?

**Answer:** No, upgrades to meet current code requirements do not meet the test for exclusion from costs considered in the substantial improvement determination (side bar). As much as we want to encourage owners to invest in retrofits that improve resistance to all natural hazards or energy efficiency, we can't pick and choose which rules to enforce and which costs to include.

Take another look at the exclusion and you'll see three important words emphasized: correct existing violations. Clearly, replacing windows and other elements of mitigation retrofits doesn't meet that test. Section 4.4.8 in the "Substantial Improvement/Substantial Damage Desk Reference" ([FEMA P-758](#)) provides guidance for this exclusion for costs to correct existing identified (cited) health, sanitary or safety code violations.

**Question:** Our FIRMs are several years old and it'll be a few years before they're revised using our high-resolution topography. What do we do when the FIRM shows ground above the BFE is in the SFHA? What about when a site is shown in Zone X, but the ground is below the BFE?

**Answer.** You could take the easy path and say "we adopt the Flood Insurance Study and maps, the maps show the SFHA, and that's what we regulate – good, bad or ugly." What bothers me about that answer is it means you'd ignore credible technical evidence that the flood risk described in the FIS and shown on the FIRM is not reasonable. So here are answers that make more sense:

- **Topo shows ground above the BFE, but FIRM shows the site in the SFHA.** This scenario is fairly straightforward. Advise the property owner to submit documentation to FEMA to obtain a Letter of Map Amendment. A LOMA is an official amendment to the FIRM based on technical data showing a property was incorrectly included in the SFHA, but is actually on natural high ground above the BFE. However, communities adopt FIS/FIRMs and must regulate SFHAs shown on FIRMs. Until and unless a LOMA is issued, the site must be regulated. Of course, because the ground is already higher than the BFE, meaning the building would also be higher, the only requirement is prohibition on basements.

### **Substantial Improvement**

The NFIP definition for "substantial improvement" excludes from the costs of improvement "any project for improvement of a structure to **correct existing violations** of state or local health, sanitary or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions."

- **Topo shows ground below the BFE, but FIRM shows the site in Zone X.** Ignoring this scenario would allow people to build at-risk. Yes, outside the mapped SFHA based on the FIRM, but on ground that would be inundated during conditions of the base flood (I expect some lawyers representing property owners allowed to build and then got flooded would have a good time with that). Some states and communities include specific “elevation prevails” language in their floodplain management regulations to clearly provide authority to regulate these areas not shown on FIRMs (side bar). While having that language certainly makes it easier, in my opinion it’s not necessary. I think the public purpose of protecting public safety and minimizing future flood damage is sufficient basis on which communities can regulate areas that clearly are subject to flooding under base flood conditions, even if not shown as SFHA on FIRMs. In addition, the NFIP has an expectation that communities will “review subdivision proposals and other proposed new development to determine whether such proposals will be reasonably safe from flooding” (44 CFR § 60.3(a)(4)).” Every local floodplain management ordinance includes the phrase “reasonably safe from flooding.” I think paying attention to good topo data, and regulating land under the BFE, rises to the level of this expectation.

### **Florida’s Model Ordinance**

Where field surveyed topography prepared by a Florida licensed professional surveyor or digital topography accepted by the community indicates that ground elevations:

- (1) Are below the closest applicable base flood elevation, even in areas not delineated as a special flood hazard area on a FIRM, the area shall be considered as flood hazard area and subject to the requirements of this ordinance and, as applicable, the requirements of the *Florida Building Code*.
- (2) Are above the closest applicable base flood elevation, the area shall be regulated as special flood hazard area unless the applicant obtains a Letter of Map Change that removes the area from the special flood hazard area.

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! Explore back issues of the [Floodplain Manager's Notebook](#).

## **Grant Opps...**

Just a reminder to bookmark the Florida Climate Institute’s website for a comprehensive list of [funding opportunities](#). It’s a fabulous resource.