A couple of years ago when conducting Community Assistance Visits for a state, I pulled into a small, rural town in the middle of a big county. The town officials had received the standard preliminaries: a letter from the state scheduling the CAV, asking for permit records, maps and other documentation to be available, and letting them know a contractor would conduct the visit. And I’d called the week before to confirm the appointment.

After driving through the town’s Special Flood Hazard Area, noting what looked like a couple of fairly recent buildings and some grading in the floodway, I got a cup of coffee and walked into the tiny town hall to greet the county building inspector. No one from the town was present (indeed, the only person in the office seemed to be pulling double-duty as police dispatcher). Why? Because the county did all the permitting for the town, with town council handling only zoning reviews. After trying to reach the town clerk and mayor, I reluctantly proceeded with the visit.

Why reluctantly? When a community decides to participate in the NFIP it makes commitments to do certain things in return for the availability of NFIP flood insurance and certain forms of disaster assistance. The primary commitment is to adopt and enforce floodplain management regulations. I definitely encourage small towns to have interlocal agreements or memoranda of understanding with counties or larger cities, or even to contract out permitting and inspections. It’s unreasonable to expect small towns to maintain full capacity and awareness of the details of floodplain management, especially if they see very little development.

However, in my opinion, having such arrangements does not relieve a town of its responsibilities to the NFIP. It’s one thing to delegate the work. It’s quite another to delegate full responsibility. Remember, regardless of who does the permitting and inspections, if things go south, FEMA will sanction the town, not the county or a contractor.

And that is exactly why interlocal agreements should be in writing and executed by both parties. A few years ago I helped the Florida State Floodplain Management Office develop a template agreement (under Local Coordination Resources) that can also be modified and used as a contract scope of work with a private provider. In addition to the typical legalese in contractual agreements, three elements should be included:

1. **Identify the town’s floodplain management regulations, with a list of any requirements that vary from the county’s.** The most common difference is freeboard. I know towns that didn’t adopt freeboard, but the county did. Would it surprise you to learn buildings in the town were elevated above the BFE? Why would that happen? Well, the county floodplain administrator simply treated town permits just like county permits, enforcing the county’s regulations. Now, imagine it going the other way, with the town adopting freeboard while the county doesn’t. Neglecting differences means the county doesn’t really enforce the town’s ordinance and property owners in the town wouldn’t get the benefit of freeboard, including lower flood insurance costs.

2. **Identify responsible officials on both sides and their duties.** The town must still appoint a floodplain administrator. A good practice is for the two parties to develop written procedures to ensure all functions and duties necessary to participate in the NFIP are conducted properly. Among those duties should be reviewing applications, issuing permits, conducting inspections, checking for unpermitted activities, maintaining records, participating in meetings and communications with the state and FEMA (including CAVs,
CACs and CRS verification visits), resolving problems identified during visits and coordinating after damaging events.

3. **Outline what happens if one party decides to withdraw.** While several aspects should be covered, one very important action is the transfer of records to the town. The NFIP expects communities to maintain certain records permanently. The alternative is for the county to give the town copies of necessary documentation every time a permit is issued.

From time to time I’m asked whether small towns can simply adopt a county’s regulations by reference, instead of a full soup-to-nuts ordinance. Another question is whether a town can formally, in its ordinance, designate a county official as its floodplain administrator. I’ve even seen a town ordinance designate a private company! In my opinion, the answer to both questions is no, because neither action meets the letter nor the intent of the NFIP regulations that the community be responsible. I do, however, encourage towns to use the county’s regulations as the starting point, tailoring it to their own situation. This minimizes the differences, which of course makes it easier for the county to enforce.

**Responding to a recent news story.** No wonder people have a negative reaction to floodplain management – yet again I saw a news story (or heard a local official) say some variation of “improvements on a building in the SFHA cannot exceed 50 percent of the value of the structure.” Phrased that way, is anyone surprised when property owners object to government overreach? I can (almost) forgive the press. I served as the ASFPM Legislative Officer during the throes of Congressional debate leading up to the 1994 NFIP Reform Act. After one of many hearings, a reporter for a major newspaper bungled what I thought an important detail. Wise counsel from one of our own, Dave Canaan of Charlotte-Mecklenburg, NC: “consider it a success if the press gets the story at least half right.” That advice has served me well.

But I’m less forgiving when floodplain management professionals use shorthand and mischaracterize what is already one of the most misunderstood and difficult requirements. Come on people, we can do better than that. Any owner of any existing, nonconforming building can do any amount and type of improvement. The kicker is if the cost of the work equals or exceeds the market value of the building.

**“Flood opening”** is the correct term, but we know what it means if someone calls it a “flood vent.” When it comes to construction, the term “vent” is short for ventilation, which has to do with the movement of air. NFIP Technical Bulletin 1 uses “air vents” and “air vent devices” to refer to the devices intended for ventilation that are inserted in or installed over enclosure wall openings to facilitate the movement of air into and out of crawlspaces. Air vent devices typically can be closed manually or may have detachable solid covers so owners can close off the vents during cold weather to prevent frozen plumbing. Flood openings must allow the automatic entry and exit of rising and falling floodwaters – in both directions – to minimize unequal hydrostatic force on foundation walls and walls of enclosures.

Flood openings come in two flavors: engineered openings (designed to perform, typically resulting in fewer holes) and non-engineered openings (provide 1 square inch of net open area for each square foot of enclosed area). While an air vent device can be used as a non-engineered flood opening if disabled in the open position, the net open area must be measured taking into consideration the presence of face plates, grills, screens, grates or fixed blades or louvers. Most manufacturers of air vents indicate the number of square inches each device provides for air flow (a typical 8x16 air vent device or cover provides between 45 and 65 square inch net open area). TB 1 says the same number should be used for the net open area calculation when air vent devices are installed as flood openings. The *Non-Engineered Openings Guide* is a handy source of net open area measurements for 30 commonly used air vents.

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**The Insider** November 2015
I’m not suggesting we sugarcoat substantial improvement and substantial (there’s a reason it’s sometimes known as the “dreaded 50 percent rule”). I’m suggesting we put a little more effort to be clear and correct: buildings can be improved and repaired after damage, but if the costs are 50 percent or more of the market value of the building, it triggers a requirement to bring the building into compliance. And then the fun begins when you explain what that means! Be sure to keep *Substantial Improvement/Substantial Damage Desk Reference* (FEMA P-758) close at hand.

**From last issue:** In the September *Insider* I wrote about sources of information and guidance for floodplain managers to figure out what the regulations mean and I listed several FEMA publications. The other day I was asked why I didn’t list FEMA 480, which ASFPM uses as the study guide for the CFM exam. I should have, although it’s not at the top of my go-to sources largely because it doesn’t cover some issues thoroughly and some content is out of date. Also, I should have expanded my note about building code resources. Two other sources are valuable for communities enforcing building code with flood requirements: (1) the commentary for ASCE 24 *Flood Resistant Design and Construction* (in the back of the book); and (2) commentaries to the International Building Code, International Residential Code, International Existing Building Code and the other I-Codes. When you buy the I-Codes, consider buying the commentaries because they include the code text and explanatory material.

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

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**U.S. Government Accounting Office released Nov. 19 the report from the July forum, "Preparing for Climate Related Risks: Lessons from the Private Sector."**

The GAO convened this forum because, according to the National Climate Assessment, climate-related impacts can present wide-ranging and sometimes cascading risks across the economy and at all levels of government. This assessment and a study by the Center for Climate and Energy Solutions, a nonpartisan, nonprofit organization, reported that climate-related risks can affect businesses in a variety of ways. In addition, GAO has previously found that the federal government faces fiscal exposure from climate-related risks and that building in resilience to protect against future damage is one strategy to help manage these risks.

Read "Preparing for Climate Related Risks: Lessons from the Private Sector," and/or check out the forum highlights.