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Flood Damage Not Limited to 'Flood Zones'

By Christopher J. Boggs, CPCU, ARM, ALCM

June 17, 2008

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"I don't need flood insurance; I'm not in a 'flood zone.'" Or, "I don't need flood insurance because my mortgage company said I don't need it." These statements are made more often than any insurance professional would like to admit; but the frightening part is many agents might agree with the statement without question or understanding of the depth of fallacy in both statements.

Every structure located in one of the more than 20,400 NFIP-participating communities is in a "flood zone;" the insured's house or building just may not be in one of the more hazardous ones. The client is really trying to say, "I don't need flood insurance because I'm not in a special flood hazard area (SFHA)." They just don't know the correct terminology, but agents need and must know the correct terms when discussing flood coverage. And, as will be seen, being located outside a SFHA does not guarantee safety from flood loss.

Other often used misnomer in news reports and newspapers are "100-year flood plain," or the "100 year flood event." Although the creation and use of both terms makes some sense based on the statistical calculations used to establish hazardous flood areas.

"Flood zone," "100-year flood plain" and "100-year flood event" are three phrases favored by the media and perpetuated by clients (and some agents). These over-simplified attempts to describe special flood hazard areas (SFHA's) are incorrectly applied to the true exposure faced.

Defining Special Flood Hazard Areas (SFHAs)

A special flood hazard area is defined as an area that has a **1 percent chance** of being inundated by flood waters in any given year (thus the creation of the term "100-year flood plain"). Flood waters have an equal chance of submerging these areas every year for five straight years, or not for 200 years; there is simply a 1 percent statistical possibility **EVERY** year. Homes located in special flood hazard areas have a 26 percent chance of suffering flood damage over the normal 30-year life of a loan according to FEMA.

There are two broad classifications of special flood hazard areas: 1) "A" zones, and 2) "V" zones. Further information about these zones can often be found on Flood Insurance Rate Maps (FIRM's) by use of sub-classifications such as "AR," "AO" or "VO." These and other SFHA sub-classifications provide more detailed information about the pattern and characteristics of flooding in the specified area. Detailed information about each of the Special Flood Hazard Area sub-classifications can be found on-line at <http://www.fema.gov/pdf/nfip/manual200805/16map.pdf>.

What Makes a "V" a "V"?

Differentiating between "A" zones and "V" zones is simple; "V" zones are generally located near areas subject to hazardous tidal flows (waves) such as the ocean. "A" zones are those areas simply subject to inundation by overflow of rivers, low-lying areas subject to ponding, etc. "V" can be used to signify "velocity;" the water is flowing with the increased hazard and damage of wave action. "A" can mean "altitude;" the water goes up and goes back down, but it lacks the damaging wave action of a "V" zone.

When reviewing a coastal Flood Insurance Rate Map (FIRM) it is common to find "V" zones morph into "A" zones. Both areas are still special flood hazard areas, there's just a difference in the supposed hazard and potential damage leading to different rating criteria. A common question in flood classes is, "How is that point decided? Where does a "V" become an 'A'?"

To establish this point, engineers must calculate two heights: 1) the "100-year" still water height; and 2) wave heights above the still water height. Wave height decreases the further up the shore it moves; when the anticipated height of the tidal wave falls to less than 3 feet above the "100-year" still water height the "V" zone ends and the "A" zone begins. Base Flood Elevation (BFE) and 100-year still water height are not synonymous. The BFE includes some wave action in its calculation.

Agents who write flood coverage do not necessarily need this information for rating purposes, but it is essential to understand it when discussing coverage and rating with a client. Removing some of the mystery in flood insurance can put the client more at ease.

"A" and "V" Zone Differences

Reference points used for rating policies in special flood hazard areas differ depending on a structure's zonal location. "A" zones use the bottom of the first elevated floor as the reference point to calculate the height above (or below) base flood elevation. Conversely, "V" zones use the bottom of the lowest horizontal support for the measuring point. "V" zone reference points could be as much as 18 inches to two feet lower than "A" zone reference points. Why is the bottom of the lowest horizontal support used in a "V" zone? Due to the damage potential presented by wave action.

"A" and "V" zones also differ regarding the acceptable means for elevating the insured structure. Structures located in "A" zones may be elevated above Base Flood Elevation either by pilings, columns, shear walls or solid foundation perimeter wall with appropriate openings. Pilings, columns, shear walls or "breakaway" walls are the only acceptable elevation methods in "V" zones.

Proper openings in a solid foundation perimeter wall (eligible in "A" zones only) allow for the free passage of water into and out of the building without requiring human intervention to open or close. Other NFIP requirements are: 1) a minimum of two openings on different sides of each enclosed area; 2) there must be at least 1 square inch of opening for each square foot of enclosed space; 3) the bottom of the openings must be no more than one foot above the grade immediately below the vent; and 4) windows, doors and garage doors are not considered proper openings. If the structure lacks sufficient openings as defined, the reference point becomes the ground under the structure.

Pilings, columns, shear walls or "breakaway" walls are the only NFIP allowable method for elevating a structure in "V" zones. Following is a description of two of these options:

- **Shear Wall:** A shear wall is a structural support running parallel (as nearly as possible) to the flow of the water. These walls are not structurally joined at the ends allowing for water to flow through unimpeded.
- **Breakaway Walls:** Breakaway walls are non-structural walls perpendicular to the flow of water (takes the direct hit) designed to fail under certain wave force conditions. The failure of these walls should cause NO damage to the structural supports, the foundation or any part of the building above the walls.

Supposed "Non-hazardous" Flood Zones

Non-special flood hazard areas are historically delineated using "B," "C" or "X." These are considered areas of moderate or minimal hazard generally only expected to flood in times of severe storms or when drainage problems exist. However, 25 percent to 30 percent of all flood insurance claims are paid in these "less hazardous" areas; so clients should not ignore flood insurance just because they are not in areas considered "hazardous."

Zones historically labeled "B" and "C" are being replaced with just "X." As Flood Insurance Rate Maps are updated, non-SFHA's will be assigned a "Shaded X" or an unshaded "X." Base flood elevations are not indicated in either "X" zone.

"Shaded X" zones correspond to areas with a higher probability of flooding than areas tagged by an unshaded "X." A "Shaded X" indicates the area has a 0.2 percent annual chance of flooding (the "500-year" flood line) or a 1 percent chance of experiencing flooding of **less** than one foot in any given year (not high enough to be classified as a special flood hazard area).

Agents with clients depending on Difference in Condition (DIC) policies to provide flood coverage need to pay close attention to the flood coverage exclusions in the DIC policy. Some DIC forms exclude flood outright or increase the flood deductible to match the maximum available coverage offered by NFIP policies for structures located in Special Flood Hazard Areas ("A" and "V" zones) **and** Shaded "X" zones. This wording is often thrown in without the agent's or insured's knowledge; if it cannot be negotiated out, then the insured must be informed, and any structures located in shaded "X" zones must be covered by an NFIP policy.

Areas where the flood hazard is undetermined are shown on the FIRMs with a zone "D." This zone may also be used when one community incorporates portions of another community where no map has been previously prepared.

Zone Lines: More Than One Zone

Flood zones do not follow property boundary lines; they are a function of the water source, protective measures, erosion, drainage and other factors. Zones may change in the middle of an individual's yard or in the middle of the living room. When must the more hazardous zone be used?

The more hazardous zone is used when **ANY** part of the structure is divided by the line; even if it is a part of the structure not covered by the flood policy. If the attached deck attached at the rear of the house is partially in an "A" zone and partially in an "X" zone, the entire house is rated in the "A" zone, even though the deck is not covered by the flood policy.

If the line is in the back yard, rating is based on the zone in which the house is located. It is not the zone of the land that matters, it is the zones in which the structure itself is located.

Following This

Future articles will discuss the three main standard flood insurance policies and terms and conditions specific to Federal flood insurance. Legislation critical to the availability of Federal flood coverage will also be detailed more thoroughly.

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