A flood zone, a floodplain, or, in modern terminology, a Special Flood Hazard Area (SFHA) is defined by the Federal Emergency Management Agency (FEMA) as any “area having special flood, mudflow, or flood-related erosion hazards, and shown on a Flood Hazard Boundary Map (FHBM) or a Flood Insurance Rate Map (FIRM) as Zone A, AO, A1-A30, AE, A99, AH, AR, AR/A, AR/AE, AR/AH, AR/OA, AR/A1-A30, V1-V30, VE, or V”.

Further defined, a SFHA subject to inundation by the 1% annual chance flood (the base flood) is any area subject to a flood event “that has a 1% chance of being equaled or exceed in any given year”.

Any property subject to the 1% annual chance flood, as shown on the community’s Flood Insurance Rate Map (FIRM), areas otherwise known as “high risk areas”, are required to be covered by flood insurance if federal or federally-backed financial assistance is used for purchase of the property, or for rehabilitation or construction of structures on the property using federally-sourced funding. Flood insurance is required for the term of the loan and is required to be the lesser of the maximum amount of available NFIP coverage for the particular type of structure being insured or the outstanding principal balance of the loan, minus the land value. Flood insurance coverage is important since a 1% annual chance flood has a 26% chance of occurring over the lifetime of most 30 year mortgages.

Although, property that is not in an area subject to the 1% annual chance flood, as shown on the community’s Flood Insurance Rate Map (FIRM), also known as a “low to moderate risk area”, is not required, in most instances, to be covered by flood insurance, it is still wise to purchase flood insurance, since, according to FEMA, 25 to 30% (maybe even as high as 33% in some years) of flood claims come from these low to moderate risk areas (areas located outside of the SFHA). Lenders, at their discretion, may require the purchase of flood insurance even if the property is located outside of the SFHA. In those instances, the flood insurance can often be purchased as a “preferred risk policy” with substantially lower premiums than a conventional flood insurance policy.

The accurate identification of flood zones (SFHAs) is crucial to making sure that flood insurance is purchased for at-risk properties.

“Simply defined, a flood cert or flood certification in real estate is a document that states the flood zone status of real property. FEMA (Federal Emergency Management Agency) flood maps are examined using the address or geographic coordinates of the property. Using the location on the map, the flood certification provider certifies what, if any, flood zone in which the property is located. In purchases where there is a lender involved, the lender has a resource to accomplish this task. The fee is charged to the buyer in the 800 series items on the HUD-1 Settlement Statement. The lender is, of course, protecting their loan asset by verification of the risk of damage or loss by flooding. If the property is at risk, it doesn’t necessarily preclude a loan, but flood insurance could be required.” (about.com/real estate)

For lenders, flood determinations can be received from a variety of sources, including a large number of flood determination companies nationwide, from the community’s Geographic Information System (GIS), or from the community’s floodplain manager via use of the community’s Flood Insurance Rate Maps (FIRMs) and Flood Insurance Study (FIS), although most choose to use the services of flood determination companies.

There is a second step in this process, although one that is often overlooked, especially in states (like Georgia) with no requirement for it, and that is the flood certification found on the loan or mortgage plat. The surveyor’s determination of the flood zone for the property being platted can be a second line of defense in
The role the land surveyor plays in land surveying in the process of ensuring sound floodplain management is important in today’s flood fight.

Additionally, surveyors play an important role in determining the rate (the cost) for those required to purchase flood insurance via their role in preparation of the Elevation Certificate (FEMA Form 81-31). The Elevation Certificate shows elevation information on any structure and its compliance with the provisions of the NFIP and the community’s flood ordinance regulations. The EC can also be used by the property owner to obtain flood insurance and by the insurance company in the rating of that flood insurance policy. So it is best to obtain an Elevation Certificate before you get a flood insurance quote from your insurance agency. The role the surveyor plays in correctly determining a structure’s elevation in relation to the base flood elevation and in relation to the existing ground elevation can mean a difference of hundreds of dollars each year in flood insurance premiums to the structure’s owner. Other factors found on the Elevation Certificate that determine flood insurance premium cost include, but are not limited to, date of construction, building type (for example with or without basement), the number of and square footage of flood openings, and the location and height (above the ground or BFE) of machinery or equipment such as hot water heaters and air conditioning units.

The Elevation Certificate can also be used, as part of the Letter of Map Amendment (LOMA) process, to determine if the structure, portions of the property, or the entire property, is located in the Special Flood Hazard Area; in the case of the latter scenario, thereby eliminating the federal requirement to purchase flood insurance. Even if the property is determined to be outside of the SFHA or the structure is elevated sufficiently to be above the BFE, flood insurance can still be purchased at substantially reduced premiums and / or as a preferred risk policy.

The wide variety of services provided by land surveyors is vital in today’s flood fight. The role the land surveyor plays in land issues, especially floodplain issues, is important, not only to the property owner, but also to other related professions, such as lending institutions, as well. “For example, for a Realtor representing a buyer, a land surveyor can evaluate land issues, flood zone issues or insurance, subdivisions, land divisions, utilities, zoning compliance, etc. These often overlooked items are large issues found outside of the physical structure itself, but which can potentially have a large value associated with them. Early assistance by a land surveyor in a project can resolve many issues and create many positive options. A land surveyor, when properly utilized, provides greater client representation, Jim Nadeau describes it like this: A client many years ago said, “You’re the last one I called on this project.” My friend and former business partner responded, “I should have been the first.”


The take away message and one that surveyor’s can pass along to their clients is this:

Buyer Beware! Flooding is and continues to be the number one natural hazard in the United States, and it is important to remember that standard homeowners’ insurance does not cover damages from floods (rising water). A flood certification should be a part of the knowledge base any prospective buyer possesses when purchasing a piece of property, especially property in or near a Special Flood Hazard Area (SFHA). A licensed land surveyor, certified or professional engineer, certified architect, or floodplain professional (as authorized by local law or ordinance) can help in the flood determination process. This is not a step in the property purchase process to be skipped or to be taken lightly. Nor is the flood risk of any piece of property something that a prospective buyer wants to “take somebody’s word on”. As a potential property owner, it is important to get the facts! And don’t forget the old adage, “An ounce of prevention is worth of pound of cure.” That is to say, the investment in getting a property properly certified as to its flood risk is far, far less than the cost of the potential negative consequences if you don’t.

Terri L Turner is the Development Administrator for the City of Augusta (Georgia) Planning & Development Department. She is also the Association of State Floodplain Manager’s (ASSPFM’s) Region 4 Director and No Adverse Impact (NAI) Committee Co-Chair. “Before she became a bureaucrat” as she describes it, Terri spent 16+ years in the engineering and surveying fields so she understands the importance of engineering and land surveying in the process of ensuring sound floodplain management.