

Safely Building on a Major Waterway

As Chattanooga, Knoxville, Decatur, and other towns along the Tennessee River are doing or have done, Huntsville, Alabama will develop its Tennessee River front along with Hobbs Island. When finished, Butler Basin alone will have 600 plus homes planned in a TND (Traditional Neighborhood Development) built around a River Town. Since development on the Tennessee River is new to Huntsville, let's take a minute to go over some relevant information as to safely building your new home on a major waterway.

As a registered architect and land planner, I have performed extensive research in order to safely plan a development on the Tennessee River. There are at least six terms which you need to understand when building on a waterway. They are floodplain, flood zone, flood hazard district, flood fringe, floodway, and the 100 year flood elevation (event). Unfortunately many, including individuals, real estate agents, and media outlets use these six terms indiscriminately, although they can have very different meanings.

A large portion of Huntsville, including downtown, is in the floodplain (zone), or flood hazard district, and all river land is in a floodplain. Actually, all three mean the same thing. The flood plain's boundary is determined by the 100 year flood elevation, being defined as the water level having a one percent chance of being equaled or exceeded in any given year. The floodplain is then divided into the flood fringe and the floodway. Generally speaking, you will be required to build your finish floor one foot above the 100 year flood elevation on any site in the flood fringe. All designated building areas at Butler Basin are safe to build. We are on high ground located at the foot of Wallace Mountain.

It is the floodway that you need to be aware of! It is difficult if not impossible to get approval to build in the floodway unless it is at existing grade with no fill. For example, you could pave an area to park or store your boat or RV. Appreciate the floodway for what it is ...an area clear of buildings and other obstructions so that flood elevations will not be increased significantly during a flood event. The floodway can be the most beautiful part of your site. When you hear the term "floodplain", "flood zone", "flood Hazard district" and "flood Fringe", all with the word "flood" in them, don't assume the home site is in the more serious "floodway". Do your own due diligence or better still go to a license engineer, surveyor, or the city/county where the property is located and ask this specific question: "In relation to the property I'm considering buying, where is the floodway and what is the 100 year flood elevation?" After you find this out, see if there is sufficient land left over not in the floodway to build your home. If there is, make sure your finish floor is at least one foot above the 100 year flood elevation. Unless your lending institution has guidelines stronger than FEMA's, and they probably don't, you will, after submitting the proper paper work, probably not be required to carry flood insurance.

There is one more factor I would consider when buying river front property. Consider how your site is affected by a localized rain event, since localized events are the hardest to predict. When you hear on the news that many localized areas of, in this case North Alabama, are flooding, the Tennessee River at Butler Basin may not have come up any. In fact it may have dropped. Rising water on the Tennessee River is usually only affected by a major rain event that covers the whole Tennessee River drainage basin from eastern Tennessee to the Ohio and Mississippi River. If this does happen, the water is more controllable and predictable because of the computerized lock/flood gate system on the river. Butler Basin has never been close to the 100 year flood event since 1925. This data is available on USGS's web site at:

http://nwis.waterdata.usgs.gov/al/nwis/peak/?site_no=03575500&agency_cd=USGS&format=html?site_no=03575500&agency_cd=USGS&format=html

This link is also available in this web site www.butlerbasin.com called "Flood records to 1926" Keep in mind that even a basement at Butler Basin is 18 inches (FEMA only requires 12") above the 100 year flood. Because we're on a controlled river, you are less likely to have your home flooded at Butler Basin than any other flood fringe area not on the Tennessee River.

In conclusion, you have every right and owe it to yourself to be diligent when buying on any waterway. Even if you decide to buy water front property (Flood plain property) somewhere else, still follow the guidelines above to be safe. It is as safe to build your home on the water as it is to build on the side of a mountain, but you need to do your due diligence either way.

Forest Knowles, Commodore, Great Bend Yacht Club (Fancy title for President of the Home Owners Association)

PS. And yes, although I put on my architect hat to write this...I'm also "Light Bulb Man"