

Build It Higher: Lumberton Neighborhood Avoids Widespread Flood Damage

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RALEIGH, N.C. – For years, Lumberton—the county seat of Robeson County and home to 20,000—has been at the mercy of the Lumber River which flows around and through it. Severe storms often meant costly flooding and widespread devastation. Lumberton needed a solution, so city officials looked to a freeboard ordinance to help protect structures from flooding.

The National Flood Insurance Program is a program set up by Congress in 1968 to allow property owners to purchase insurance that covers certain losses from flooding. Run by FEMA, the NFIP helps communities identify new ways to plan and build to protect themselves from costly flooding, the most widespread natural disaster in the country.

Lumberton began participating in the NFIP program in 1980 and for 25 years it required homeowners and builders at least to meet the minimum elevation level the NFIP mandated, called the Base Flood Elevation. That meant the lowest floor had to be built at least at or above the level to which water was expected to rise in a flood event.

Freeboard is a term used to describe an extra factor of safety above that level—usually a number of feet—so a structure built with freeboard would have its lowest floor one foot or more above the Base Flood Elevation.



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In 2005, the city adopted a new freeboard ordinance that required all new buildings to be elevated two feet above NFIP's Base Flood Elevation. "The goal was not just to meet FEMA elevation standards but to create a freeboard above the standard," according to Deputy City Manager Brandon Love.

The city's decision was tested in September in its Mayfair subdivision when slow-moving Hurricane Florence dumped millions of gallons of water on the area.

As Mayfair developed over 40 years, its houses were built according to the different codes and floodplain standards in effect at the time. The earliest building began around 1976 when there were no floodplain ordinances in place. Houses built during that period flooded during Hurricane Florence.

The homes built after 1980, when Lumberton began participating in NFIP, were built to Base Flood Elevation levels. Those homes suffered some damage from Hurricane Florence, mostly to duct work and insulation underneath.

For houses built after 2005—under the city's higher freeboard requirements—the results were almost predictable. Despite the widespread destruction caused by Hurricane Florence, those homes were not damaged. "The city's implementation of a tougher ordinance with freeboard regulations saved the north side of the subdivision," said Love.

Love said builders and developers pushed back against the city's stricter standards at first because of the extra cost. However, they found "the ordinance was an easy sale for the homeowners because of the benefits." He added that owners of the older homes are now assessing how to apply mitigation measures to their properties.



By lowering the risks of flooding, freeboard offers the probability of less damage, easier cleanup and significantly lower flood insurance rates.

For additional information, go to:

- [Building Higher in Flood Zones: Freeboard](#)
- [Managing Floodplain Development Through the NFIP](#)
- fema.gov/national-flood-insurance-program

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