PURPOSE

The Town and County have adopted regulations that control development in flood hazard areas for the purpose of:

- Protecting human life & health;
- Maximizing expenditure of public money;
- Qualifying residents for flood insurance;
- Minimizing rescue & relief efforts;
- Minimizing public facilities damage;
- Ensuring residents who occupy flood hazard areas assume responsibility for their actions.

Disclaimer

This brochure is for information purposes only and is not a complete list of all codes relating to buildings in flood hazard areas. The complete set of codes is available online and at the Town of Vinton Planning Office and/or Roanoke County Department of Community Development. Rules are subject to change. Please always check to verify you have the most current flyer or codes, both available on the website.

Additional Information:

Federal Emergency
Management Agency
615 Chestnut Street
One Independence Mall,
6th Floor
Philadelphia, PA 19106
Phone: (215) 931-5500

BUILDING IN FLOOD HAZARD AREAS

ANSWERS TO YOUR MOST FREQUENTLY ASKED QUESTIONS

Town of Vinton Planning Department
311 S. Pollard Street
Vinton, VA 24179
540-983-0605
www.vintonva.gov

County of Roanoke Department of
Community Development
5204 Bernard Drive
Roanoke, VA 24018
540-772-2065
www.roanokecountyva.gov

Existing structures located in the floodway shall not be expanded or enlarged (unless the effect of the proposed expansion or enlargement on flood heights is fully offset by accompanying improvements). Any modification, alteration, repair, reconstruction, or improvement of any kind to a structure located in any floodplain area to an extent or amount of fifty percent or more of its market value, shall be undertaken only in full compliance with the Virginia Uniform Statewide Building Code (USBC) and the Town of Vinton's Zoning Ordinance.

DURING CONSTRUCTION WHAT WILL NEED TO BE DONE DIFFERENTLY?

All buildings or structures erected within a flood-hazard zone shall be elevated so that the lowest floor, including basement, is elevated to or above two feet above base flood elevation for residential construction (including manufactured homes) and one foot above base flood elevation for non-residential construction (or manufactured home). All basement floor surfaces shall be located at two feet above base flood elevations.

The structure systems of all buildings or structures shall be designed by a professional engineer, connected, and anchored to resist flotation, collapse or permanent lateral movement due to structural loads and stresses from flooding equal to the base flood elevation and designed in accordance with the USBC. This would be for non-residential structures only, such as detached garages and storage buildings.

Enclosed spaces below the base flood elevation shall not be used for human occupancy with the exception of structure means of egress, entrance foyers, stairways and incidental storage. Fully enclosed spaces shall be designed by a professional engineer to equalize automatically hydrostatic forces on exterior walls by allowing for the entry and exit of floodwaters.

New and replacement electrical equipment and heating, ventilating, air conditioning and other service equipment shall be either placed above flood elevation or protected so as to prevent water from entering or accumulating within the system components during floods up to the base flood elevation in accordance with the mechanical code. Installation of electrical wiring and outlets, switches, junction boxes and panels below the base flood elevation shall conform to the provisions of the electrical code. Duct insulation subject to water damage shall not be installed below the base flood elevation.

All buildings or structures erected in flood hazard zones shall be constructed with materials resistant to flood damage (according to the USBC) and be constructed by methods and practices that minimize flood damage.

Water and Sewer systems, new or replacement, shall be designed to minimize infiltration of floodwaters into the systems in accordance with the provisions of the plumbing code.

BUILDING IN FLOOD HAZARD AREAS

Development of residential and commercial areas has an impact on surrounding land; new development can create drainage and erosion problems where none existed before. The Town of Vinton and Roanoke County have adopted more stringent ordinances to regulate commercial and residential developments, thereby minimizing the impact of storm water or its citizens.

The Town and County also participate in the National Flood Insurance Program (NFIP). This makes it possible for citizens to obtain federally backed flood insurance for building located in the floodplains of the community. To participate, the Town and County are required to…

- Adopt and enforce floodplain management measures to regulate new construction.
- Ensure that substantial improvements to existing structures within the flood hazard areas are designed to eliminate or minimize future flood damage.

MAY I BUILD IN A FLOOD ZONE?

The ordinances of the Town and County stipulate that no structures are to be built within the limits of the floodway. Non-residential structure (or manufactured home) that are built within the floodplain must be elevated to or above one foot or if the structure is residential, built so that the first floor (including the basement) is 2 feet above base flood elevation. These areas are considered flood hazard areas.

WHAT IS A FLOODWAY?

A floodway is where the water is likely to be deepest and fastest. It is an area of the flood plain that should be kept open to allow floodwaters to move away downstream. No development is permitted except where the effect of such development on flood heights is fully offset by accompanying improvements, which have been approved. The placement of any manufactured home, except in an existing manufactured home park within the floodway is specially prohibited. Permitted uses of the floodway are.

- agricultural
- public parks, recreational areas
- outdoor sports and recreation
- golf courses
- accessory residential uses such as yard areas, gardens, play areas, and loading areas.
- accessory industrial and commercial uses such as yard areas, parking and loading areas, airport landing strips, etc.

WHAT IS A FLOODPLAIN?

A floodplain is the area of land covered with water during a flood. This can also be referred to as a flood hazard area. In areas of little development, nature reduces the damage of floods with flood plains. They allow the water to spread out, reducing velocities and storing the excess water. The slowed water can drop its load of sediment and debris. This reduces the scouring of stream banks and beds. The slowed water soaks into the soil, recharging the groundwater, which in turn helps maintain stream flows during dry periods. In heavily developed areas, paving of roads and roofs keeps water from soaking into the soil and flooding becomes more frequent and intense.

WHAT IS BASE FLOOD ELEVATION?

A base flood elevation is the height in relation to mean sea level expected to be reached by the waters of the base flood at pertinent points in the flood plain. The FEMA (Federal Emergency Management Agency) Flood Insurance Rate Maps (FIRM) may help determine elevation. These maps are available for use in the Town's Planning Office and County's Engineering Office.

WHAT DOES IT MEAN WHEN THEY SAY I AM IN A 100 YEAR OR 500 YEAR FLOOD PLAIN?

The FIRM maps are based on a Flood Insurance Study and will determine in which flood plain your property is situated. Each area on the map is given a Zone letter.

Base flood, or the 100-year flood plain is the area having a 1% chance of flood occurring in any single year. So on a typical 30-year mortgage the house has the possibility of flooding 26 times. Zones in the 100-year flood plain, on Flood Insurance Rate Maps include …

- Zone A No base flood elevation determined
- Zone AE Base flood elevations determined.

The 500-year flood plain is the area that has at least a 0.2% chance of flooding each year. In the period of a 30-year mortgage, a property in the 500-year flood plain has a 6% chance of flooding. On the Flood Insurance Rate Maps, these areas are shown as follow…

- Zone X (Grey) Areas of the 500-year flood; areas of the 100-year flood with the average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.
- Zone X (White) Areas determined to be outside the 500-year flood plain.

WHAT STEPS WILL I NEED TO FOLLOW BEFORE OBTAINING A BUILDING PERMIT?

A licensed land surveyor or registered design professional will help determine your elevation levels necessary to build in a flood area. For new construction, a copy of the Flood Elevation Certificate, construction drawings and a certified plat are needed before the building permit is issued. Another Elevation Certificate at the end of construction will be needed before the Final Certificate of Occupancy may be issued.