

# CHAPTER 34 – FLOOD HAZARD REDUCTION

Secs. 34-1–34-30. – Reserved.

## DIVISION 1. – GENERALLY

### Sec. 34-31. – Purpose.

The purpose of this article is to prevent the loss of property and life, the creation of health and safety hazards, the disruption of commerce and governmental services, the extraordinary and unnecessary expenditure of public funds for flood protection and relief, and the impairment of the tax base by:

(1) Regulating uses, activities and development which, acting alone or in combination with other existing or future uses, activities and development, will cause unacceptable increases in flood heights, velocities and frequencies.

(2) Restricting or prohibiting certain uses, activities and development from locating within areas subject to flooding.

(3) Requiring all those uses, activities and developments that occur in floodprone areas to be protected and/or floodproofed against flooding and flood damage.

(4) Protecting individuals from buying lands and structures which are unsuited for intended purposes because of flood hazards.

*(Ord. of 8-12-1997, § 1.1)*

### Sec. 34-32. – Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

*Base flood/100-year flood* means a flood that, on the average, is likely to occur once every 100 years (i.e., that has a one percent chance of occurring each year, although the flood may occur in any year).

*Base flood elevation (BFE)* means the Federal Emergency Management Agency designated 100-year water surface elevation.

*Basement* means any area of the building having its floor subgrade (below ground level) on all sides.

*Board of zoning appeals* means the board appointed to review appeals made by individuals with regard to decisions of the zoning administrator in the interpretation of this article.

*Construction (new)* means structures for which a building permit was issued on or after November 12, 1985, provided actual construction began within 180 days of the permit date.

*Development* means any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, the placement of mobile homes, manufactured homes, streets and other paving, utilities, filling, grading, excavation, mining, dredging or drilling operations, or storage of equipment or materials.

*Flood* means:

(1) A general and temporary inundation of normally dry areas from:

- a. The overflow of inland or tidal waters;

b. The unusual and rapid accumulation or runoff of surface waters from any source; or

c. Mudslides which are proximately caused by flooding as defined in subsection (1)b. of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when the earth is carried by a current of water and deposited along its path.

(2) The collapse or subsidence of land along the shore of a lake or other body of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as a flash flood or by some similarly unusual and unforeseeable event which results in flooding as defined in subsection (1)a. of this definition.

*Floodplain* means:

(1) A relatively flat or low land adjoining a river, stream or watercourse which is subject to partial or complete inundation;

(2) An area subject to the unusual and rapid accumulation or runoff of surface waters from any source.

*Floodprone area* means any land area susceptible to being inundated by water from any source.

*Floodway* means the designated area of the floodplain required to carry and discharge floodwaters of a given magnitude. For the purposes of this article, the floodway shall be capable of accommodating a flood of the 100-year magnitude.

*Historic structure* means any structure that is individually listed in the National Register of Historic Places, the Virginia Register of Historic Resources, or a local inventory of historic places; or which is certified by the secretary of the interior

as contributing to the historical significance of an historic district.

*Lowest floor* means the lowest floor of the lowest enclosed area (including basement).

*Manufactured home* means a structure, subject to federal regulation, which is transportable in one or more sections, which in the traveling mode is eight body feet or more in width and 40 body feet or more in length, or when erected on site is 320 or more square feet, and which is built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities, and includes the plumbing, heating, air conditioning and electrical systems contained in the structure.

*Manufactured home park/subdivision (existing)* means a parcel (or contiguous parcels) of land divided into three or more lots for rent or sale for which the construction of facilities for servicing the lot on which the manufactured home is to be affixed (including, at a minimum, the installation of utilities, either final site grading or the pouring of concrete pads, and the construction of streets) is completed before August 12, 1997.

*Recreational vehicle* means a vehicle which is built on a single chassis, is 400 or less square feet in area when measured at its largest horizontal projection, is designed to be self-propelled or permanently towable by a light-duty truck, and is designed primarily not for use as a permanent dwelling but as a temporary living quarters for recreational camping, travel or seasonal use.

*Substantial damage* means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of the

market value of the structure before the damage occurred.

*Substantial improvement* means any reconstruction, rehabilitation, addition or other improvement of a structure the cost of which equals or exceeds 50 percent of the market value of the structure before the improvement. The term does not include any improvement to correct an existing violation of state or local health, sanitary or safety specification identified by the code enforcement official and necessary to assure safe living conditions or any alteration of an historic structure that does not preclude its continued designation as historic.

*(Ord. of 8-12-1997, art. VII)*

**Sec. 34-33. – Applicability.**

This article applies to all lands within the jurisdiction of the county and identified as being floodprone as stipulated in this article.

*(Ord. of 8-12-1997, § 1.2)*

**Sec. 34-34. – Compliance.**

No land shall be developed and no structure shall be located, relocated, constructed, reconstructed, enlarged or structurally altered except in full compliance with the terms and provisions of this article and any other applicable ordinances and regulations.

*(Ord. of 8-12-1997, § 1.3)*

**Sec. 34-35. – Abrogation and greater restrictions.**

This article supersedes any ordinance currently in effect in floodprone areas. However, any underlying ordinance shall remain

in full force and effect to the extent that those provisions are more restrictive.

*(Ord. of 8-12-1997, § 1.4)*

**Sec. 34-36. – Municipal liability.**

(a) The degree of flood protection sought by the provisions of this article is considered reasonable for regulatory purposes and is based on acceptable engineering methods of study. Larger floods may occur on rare occasions. Flood heights may be increased by manmade or natural causes, such as ice jams and bridge openings restricted by debris. This article does not imply that areas outside the floodplain districts or that land uses permitted within such districts will be free from flooding or flood damages.

(b) This article shall not create liability on the part of any officer or employee of the county for any flood damages that result from reliance on this article or any administrative decision lawfully made under this article.

*(Ord. of 8-12-1997, art. VIII)*

**Sec. 34-37. – Penalties.**

(a) Any person who fails to comply with any or all of the requirements or provisions of this article or direction of the building official, zoning administrator, or any other authorized employee of the county shall be guilty of an offense and, upon conviction, shall pay a fine to the county of not less than \$25.00 nor more than \$300.00 plus costs of prosecution. In default of such payment, such person shall be imprisoned in county prison for a period not to exceed ten days. Each day during which any violation of this article continues shall constitute a separate offense.

(b) In addition to the penalties specified in subsection (a) of this section, all other actions are reserved, including an action in equity, for the proper enforcement of this article. The imposition of a fine or a penalty for any violation of or noncompliance with this article shall not excuse the violation or noncompliance or permit it to continue; and all such persons shall be required to correct or remedy such violations or noncompliances within a reasonable time. Any structure constructed, reconstructed, enlarged, altered or relocated in noncompliance with this article may be declared by the board of supervisors to be a public nuisance and abatable as such.

*(Ord. of 8-12-1997, art. V)*

**Secs. 34-38–34-60. – Reserved.**

## **DIVISION 2. – PERMIT**

**Sec. 34-61. – Required.**

(a) All uses, activities and development occurring within the floodplain district shall be undertaken only upon issuance of a zoning permit, a health permit (if applicable) and a building permit. Such development shall be undertaken only in strict compliance with the provisions of this article and with all other applicable codes and ordinances such as chapter 70 of this Code, health department regulations relating to sewage disposal, and to the Virginia Uniform Statewide Building Code, particularly the floodproofing and related provisions of that code. Prior to the issuance of any such permit, the building official shall require all applications to include compliance with all applicable state and federal laws.

(b) Under no circumstances shall any use, activity and/or

development adversely affect the capacity of the channels or floodways of any watercourse, drainage ditch, or any other drainage facility or system.

*(Ord. of 8-12-1997, § 3.1)*

**Sec. 34-62. – Information required for site plans and permit applications.**

All applications for development in the floodplain district and all building permit applications submitted for the floodplain district shall incorporate the following information:

(1) For structures that have been elevated, the elevation of the lowest floor (including basement).

(2) For structures that have been floodproofed (nonresidential only), the elevation to which the structure has been floodproofed.

(3) The elevation of the 100-year floodplain.

(4) Topographic information showing existing and proposed ground elevations.

(5) All new subdivision proposals and other proposed developments (including proposals for manufactured home parks and subdivisions) greater than 50 lots or five acres, whichever is the lesser, shall include within such proposals base flood information data. The applicant shall also delineate a floodway area based on the requirement that all existing and future development not increase the 100-year flood elevation more than one foot at any one point (see section 34-141). The engineering principle “equal reduction of conveyance” shall be used to make the determination of increased flood heights.

*(Ord. of 8-12-1997, § 3.2)*

**Secs. 34-63–34-85. – Reserved**

**DIVISION 3. – SPECIAL EXCEPTIONS AND VARIANCES**

**Sec. 34-86. – Appeal authorized.**

(a) Whenever any person is aggrieved by a decision of the building official with respect to the provisions of this article, it is the right of that person to appeal to the building code board of appeals for a special exception/variance. Such appeal must be filed, in writing, within 30 days after the determination by the building official. Upon receipt of such an appeal, the building code board of appeals shall set a time and place for the purpose of hearing the appeal, which shall be not less than ten nor more than 30 days from the date of the receipt of the appeal. Notice of the time and place of the hearing of the appeal shall be given to all parties, at which time they may appear and be heard. The determination by the building code board of appeals shall be final in all cases.

(b) In passing upon applications for special exceptions/variances, the building code board of appeals shall satisfy the following factors:

(1) The danger of life and property due to increased flood heights or velocities caused by encroachments. No special exception or variance shall be granted for any proposed use, development or activity within any floodway area that will cause any increase in the 100-year floodplain.

(2) The danger that materials may be swept on to other lands or downstream to the injury of others.

(3) The proposed water supply and sanitation systems and the ability of these systems to prevent disease, contamination and unsanitary conditions.

(4) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owners.

(5) The importance of the services provided by the proposed facility to the community.

(6) The requirements of the facility for a waterfront location.

(7) The availability of alternative locations not subject to flooding for the proposed use.

(8) The compatibility of the proposed use with existing development and development anticipated in the foreseeable future.

(9) The relationship of the proposed use to the comprehensive plan and floodplain management program for the area.

(10) The safety of access to the property in time of flood of ordinary and emergency vehicles.

(11) The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters expected at the site.

(12) The repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as historic and the special exception is the minimum necessary to preserve the historic character of the structure.

(13) Such other factors which are relevant to the purposes of this article.

(c) The building code board of appeals may refer any application

and accompanying documentation pertaining to any request for a special exception or variance to an engineer or other qualified person or agency for technical assistance in evaluating the proposed project in relation to flood heights and velocities, and the adequacy of the plans for protection and other related matters.

(d) Special exceptions/variances shall only be issued after the building code board of appeals has determined that the granting of such will not result in unacceptable or prohibited increases in flood heights, additional threats to public safety, or extraordinary public expense; create nuisances; cause fraud or victimization to the public, or conflict with local laws or ordinances.

(e) Special exceptions/variances shall only be issued after the building code board of appeals has determined that the special exception will be the minimum relief to an exceptional hardship.

(f) The building code board of appeals shall notify, in writing, the applicant for a special exception/variance that the issuance of a special exception/variance to construct a structure below the 100-year flood elevation increases risks to life and property and will eventually result in increased premium rates for flood insurance.

(g) A record of the notification as well as all special exception/variance actions, including justification for their issuance, shall be maintained, and any special exceptions/variances which are issued shall be noted in the annual report submitted to the Federal Insurance Administration.

*(Ord. of 8-12-1997, art. IV; Ord. of 11-13-2007(2))*

**Secs. 34-87–34-110. – Reserved.**

## **DIVISION 4. – DISTRICT**

### **Sec. 34-111. – Basis of districts.**

(a) The various floodplain districts shall include areas subject to inundation by waters of the 100-year flood. The basis for the delineation of these districts shall be the 100-year flood elevations or profiles contained in the flood insurance study (FIS) and the accompanying flood insurance rate maps (FIRMs) for the county prepared by the Federal Emergency Management Agency, Federal Insurance Administration, as amended with an effective date of January 2, 2008.

(b) The approximated floodplain district shall be that floodplain area for which no detailed flood profiles or elevations are provided, but where a 100-year floodplain boundary has been approximated. Such areas are shown as zone A on the maps accompanying the flood insurance study. For these areas, the 100-year flood elevations and floodway information from federal, state and other acceptable sources shall be used when available. Where the specific 100-year flood elevations cannot be determined for this area using other sources of data, such as:

- (1) U.S. Army Corps of Engineers Floodplain Information Reports;
- (2) U.S. Geological Survey Floodprone Quadrangles;
- (3) Soil Conservation Service Flood Hazard Analyses; and
- (4) Known high water marks from past floods;

the applicant for the proposed use, development and/or activity shall determine the 100-year flood elevation in accordance with

engineering techniques. Hydrologic and hydraulic analyses shall be undertaken only by professional engineers or others of demonstrated qualifications, who shall certify that the technical methods used correctly reflect currently accepted technical concepts.

*(Ord. of 8-12-1997, § 2.1.D; Ord. of 11-13-2007(2))*

**Sec. 34-112. – Overlay concept.**

(a) The floodplain districts described in this division shall be overlays to the existing underlying area as shown on the official zoning ordinance map; and as such, the provisions for the floodplain district shall serve as a supplement to the provisions of chapter 70 of this Code.

(b) If there is any conflict between the provisions or requirements of the floodplain districts and those of any underlying district, the more restrictive provisions and/or those pertaining to the floodplain districts shall apply.

(c) If any provision concerning a floodplain district is declared inapplicable as a result of any legislative or administrative actions or judicial decision, the basic underlying zoning provisions shall remain applicable.

*(Ord. of 8-12-1997, § 2.1.B)*

**Sec. 34-113. – Official floodplain map.**

The boundary of the floodplain districts is established as shown on the flood insurance rate map, which is declared to be part of this article and which shall be kept on file at the office of the zoning administrator.

*(Ord. of 8-12-1997, § 2.2)*

**Sec. 34-114. – District boundary changes.**

The delineation of any of the floodplain districts may be revised by the board of supervisors where natural or manmade changes have occurred and/or more detailed studies conducted or undertaken by the U.S. Army Corps of Engineers or other qualified agency or an individual who documents the need for such change. However, prior to any such change, approval must be obtained from the Federal Emergency Management Agency.

*(Ord. of 8-12-1997, § 2.3)*

**Sec. 34-115. – Interpretation of district boundaries.**

Initial interpretations of the boundaries of the floodplain districts shall be made by the zoning administrator. Should a dispute arise concerning the boundaries of any of the districts, the board of zoning appeals shall make the necessary determination after a public hearing conducted pursuant to Code of Virginia, §§ 15.2-2204 and 15.2-2309. The person questioning or contesting the location of the district boundary shall be given a reasonable opportunity to present his case to the board of zoning appeals and to submit his own technical evidence if he so desires.

*(Ord. of 8-12-1997, § 2.4)*

**Secs. 34-116–34-140. – Reserved.**

**DIVISION 5. – STANDARDS**

**Sec. 34-141. – Encroachment provisions.**

(a) No new construction or development shall be permitted within the floodplain district unless it is demonstrated that the

cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the 100-year flood elevation more than one foot at any point.

(b) Within any floodway area, no encroachments, including fill, new construction, substantial improvements, or other development shall be permitted unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in the 100-year flood elevation.

*(Ord. of 8-12-1997, § 3.3)*

**Sec. 34-142. – Alteration or relocation of watercourse.**

Prior to any proposed alteration or relocation of any channel or of any watercourse, stream, etc., within the county, approval shall be obtained from the U.S. Army Corps of Engineers, the Virginia Department of Environmental Quality, and the Virginia Marine Resources Commission (a joint permit application is available from any of these organizations). Furthermore, notification of the proposal shall be given to all affected adjacent jurisdictions, the division of soil and water conservation (Virginia Department of Conservation and Recreation), and the Federal Insurance Administration.

*(Ord. of 8-12-1997, § 3.4)*

**Sec. 34-143. – Design criteria for utilities and facilities.**

(a) Sanitary sewer facilities. All new or replacement sanitary sewer facilities and private package sewage treatment plants (including all pumping stations and collector systems) shall be designed to minimize or eliminate infiltration of floodwaters

into the systems and discharges from the systems into the floodwaters. In addition, they should be located and constructed to minimize or eliminate flood damage and impairment.

(b) Water facilities. All new or replacement water facilities shall be designed to minimize or eliminate infiltration of floodwaters into the system and be located and constructed to minimize or eliminate flood damages.

(c) Drainage facilities. All storm drainage facilities shall be designed to convey the flow of surface waters without damage to persons or property. The system shall ensure drainage away from buildings and on-site waste disposal sites. The board of supervisors may require a primary underground system to accommodate frequent floods and a secondary surface system to accommodate larger, less frequent floods. Drainage plans shall be consistent with local and regional drainage plans. The facilities shall be designed to prevent the discharge of excess runoff onto adjacent properties.

(d) Utilities. All utilities such as gas lines, electrical and telephone systems being placed in floodprone areas should be located, elevated (where possible) and constructed to minimize the chance of impairment during a flooding occurrence.

(e) Streets and sidewalks. Streets and sidewalks should be designed to minimize their potential for increasing and aggravating the levels of flood flow. Drainage openings shall be required to sufficiently discharge flood flows without unduly increasing flood heights.

*(Ord. of 8-12-1997, § 3.5)*

**Sec. 34-144. – Existing structures in floodplain districts.**

(a) A structure or use of a structure or premises which lawfully

existed before August 12, 1997, but which is not in conformity with this article may be continued subject to the following conditions:

(1) Existing structures in the floodway area shall not be expanded or enlarged unless it has been demonstrated through hydrologic and hydraulic analyses that the proposed expansion would not result in any increase in the 100-year flood elevation.

(2) Any modification, alteration, repair, reconstruction or improvement of any kind to a structure and/or use located in any floodplain district to an extent or amount of less than 50 percent of its market value shall be elevated and/or flood-proofed to the greatest extent possible and in full compliance with the Virginia Uniform Statewide Building Code.

(b) The modification, alteration, repair, reconstruction or improvement of any kind to a structure and/or use regardless of its location in a floodplain district to an extent or amount of 50 percent or more of its market value shall be undertaken only in full compliance with the provisions of this article and the Virginia Uniform Statewide Building Code (VUSBC), and the entire structure shall be made to conform to the VUSBC.

(c) Uses or adjuncts of uses which are or become nuisances shall not be permitted to continue.

*(Ord. of 8-12-1997, art. VI; Ord. of 11-13-2007(2))*

### **Sec. 34-145. – Manufactured homes.**

Manufactured homes that are placed or substantially improved or sited shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to or above the base flood elevation and be securely anchored to an

adequately anchored foundation system to resist flotation, collapse and lateral movement.

*(Ord. of 8-12-1997, § 3.6)*

**Sec. 34-146. – Recreational vehicles.**

(a) Recreational vehicles placed on sites shall either:

(1) Be on the site fewer than 180 consecutive days or be fully licensed and ready for highway use; or

(2) Meet the permit requirements for placement and the elevation and anchoring requirements for manufactured homes as contained in the Virginia Uniform Statewide Building Code.

(b) A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick-disconnect-type utilities and security devices, and has no permanently attached additions.

*(Ord. of 8-12-1997, § 3.7)*