

## *Floodplain Zoning Ordinance Amendment*

### **ARTICLE 28. FLOODPLAIN DISTRICTS AND DAM BREAK INUNDATION ZONES**

#### **Sec. 15-451. Statement of intent.**

~~In the interest of promoting the public health, public safety, and public welfare, the regulations of this district are intended to protect areas of floodplain necessary for floodwaters, and to permit and encourage the retention of open land uses located and designed to constitute a harmonious and appropriate part of the physical development of the county as provided for in the comprehensive plan. In advancing these principles, the specific purpose of this district is to minimize and reduce the loss of life and property, reduce health and safety hazards, avoid disruption of commerce and governmental services, and eliminate the extraordinary and unnecessary expenditure of public funds for flood protection and relief, or the impairment of the tax base by:~~

- ~~A. Regulating uses, activities, and developments which, along or in combination with other existing or future uses, activities, and development, will cause unacceptable increases in flood heights, velocities, and frequencies.~~
- ~~B. Restricting or prohibiting certain uses, activities, and developments from locating within districts subject to flooding.~~
- ~~C. Requiring all these uses, activities, and developments that occur in flood-prone districts to be protected and/or floodproofed against flooding and flood damage.~~
- ~~D. Protecting individuals from buying land and structures which are unsuitable for intended purposes because of flood hazards.~~
- ~~E. Protecting individuals from the impacts within dam break inundation zones from failure of impounding structures.~~

#### **Sec. 15-452. Applicability.**

~~These provisions apply to all lands within the county identified as being in the 100-year floodplain as shown in the flood insurance study for Goochland County prepared by the Federal Emergency Management Agency, dated December 2, 2008.~~

#### **Sec. 15-453. Compliance and liability.**

- ~~A. No land can be developed and no structure can 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 which apply to uses within the jurisdiction of this article.~~
- ~~B. This article does not create liability on the part of the county or any of its officers or employees for any flood damages that result from reliance on this article, or any administrative decision lawfully made thereunder. This article does not imply that districts outside the floodplain district, or that land uses permitted within such district, will be free from flooding or flood damages.~~

## **Sec. 15-454. Definitions.**

The following words and phrases mean the following for this article:

- A. ~~Base flood/100-year flood.~~ A flood that, on average, is likely to occur once every 100 years (i.e., that has a 1% chance of occurring each year, although the flood may occur in any year).
- B. ~~Base flood elevation (BFE).~~ The Federal Emergency Management Agency designated 100-year water surface elevation.
- C. ~~Basement.~~ Any area of the building having its floor subgrade (below ground level) on all sides.
- D. ~~Development.~~ Any manmade change to improved or unimproved real estate including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials.
- E. ~~Elevated building.~~ For insurance purposes, a no basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns.
- F. ~~Encroachment.~~ The advance or infringement of uses, plant growth, fill, excavation, buildings, permanent structures, or development into a floodplain, which may impede or alter flow capacity of a floodplain.
- G. ~~Flood.~~
  - (1) ~~A general and temporary condition of partial or complete inundation of normally dry land areas from:~~
    - a. ~~The overflow of inland waters; or~~
    - b. ~~The unusual and rapid accumulation or runoff of surface waters from any source; or~~
    - c. ~~Mudflow - a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water.~~
  - (2) ~~The collapse or subsidence of land along the shore of a lake or similar body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels; or suddenly caused by an unusually high water level in a natural body of water due to a severe storm; or by an unanticipated force of nature, such as a flash flood; or by some similarly unusual and unforeseeable event that results in a flood.~~
- H. ~~Floodprone area.~~ Any land area susceptible to being inundated by water from any source.
- I. ~~Floodplain.~~
  - (1) ~~A relatively flat or low land area adjoining a river, stream, or watercourse which is subject to partial or complete inundation; or~~
  - (2) ~~An area subject to the unusual and rapid accumulation or runoff of surface~~

water from any source.

- J. ~~*Floodproofed.* A structure designed to be watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. Floodproofing design and specifications must be developed or reviewed by a registered professional engineer or architect to certify that the design and methods are in accordance with the Federal Emergency Management Agency's national flood insurance regulations.~~
- K. ~~*Floodway.* The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to carry and discharge floodwaters of a given magnitude without cumulatively increasing the water surface elevation more than a designated height. For purposes of this article, the floodway must be capable of accommodating a flood of the 100-year magnitude.~~
- L. ~~*Freeboard.* A factor of safety usually expressed in feet above a flood level for purposes of flood plain management. "Freeboard" tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, bridge openings, and the hydrological effect of urbanization of the watershed.~~
- M. ~~*Historic structure.* Any structure that is:~~
- ~~(1) Listed individually in the department of interior's national register of historic places, or preliminarily determined by the secretary of the interior as meeting the requirements for individual listing on the national register; or~~
  - ~~(2) Certified or preliminarily determined by the secretary of interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the secretary to qualify as a registered historic district; or~~
  - ~~(3) Individually listed on the state inventory of historic places.~~
- N. ~~*Lowest floor.* The lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for vehicle parking, building access, or storage in an area other than a basement is not considered a building's lowest floor; provided, that the enclosure is not built so as to render the structure in violation of the applicable nonelevation design requirements of 44 CFR § 60.3.~~
- O. ~~*New construction.* For purposes of determining insurance rates, structures for which the "start of construction" commenced on or after the effective date of an initial flood insurance rate map (FIRM), or after December 31, 1974, whichever is later, and includes any subsequent improvements of those structures. For floodplain management purposes, "new construction" means structures for which the "start of construction" began on or after December 2, 2008, and includes any subsequent improvements to the structures.~~
- P. ~~*Special flood hazard area.* The land in the floodplain subject to a 1% or greater~~

chance of flooding in any given year. The area may be designated as Zone A on the flood insurance rate map. After detailed ratemaking has been completed in preparation for publication of the flood insurance rate map, Zone A usually is refined into Zones A, A1-30, AE, A99, etc.

- Q. ~~*Start of construction.* The date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site (such as the pouring of a slab or footings), the installation of piles, the construction of columns, or any work beyond the state of excavation, or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations, or the erection of temporary forms; nor does it include the installation of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main building. For a substantial improvement, the actual start of construction means the first alteration on any wall, ceiling, floor, or other structural part of a building, even if the alteration does not affect the external dimensions of the building.~~
- R. ~~*Substantial damage.* 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% of the market value of the structure before the damage occurred.~~
- S. ~~*Substantial improvement.* Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50% of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage" regardless of the actual repair work performed. The term does not, however, include either: (1) any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety codes which have been identified by a code enforcement official and which are the minimum necessary to assure safe living conditions or (2) any alteration of an "historic structure," provided that the alteration will not preclude the structure's continued designation as an historic structure.~~
- T. ~~*Watercourse.* A lake, river, creek, stream, wash, channel or other topographic feature on or over which waters flow at least periodically. Watercourse includes specifically designated areas in which substantial flood damage may occur.~~

#### **Sec. 15-455. Description of districts.**

- A. ~~*Basis of districts.* The various floodplain districts include areas subject to inundation by waters of the 100-year flood. The basis for the delineation of these districts is the flood insurance study and the flood insurance rate maps for the county prepared by the Federal Emergency Management Agency, dated December 2, 2008.~~
- (1) ~~The floodway district is delineated for purposes of this article using the criteria that a certain area within the floodplain must be capable of carrying the waters~~

~~of the 100-year flood without increasing the water surface elevation. The areas included in this district are specifically defined in the flood insurance study and shown on the accompanying flood insurance rate map.~~

- ~~(2) The flood fringe district is that area of the 100-year floodplain not included in the floodway district. The basis for the outermost boundary of this district shall be the 100-year flood elevations contained in the flood profiles of the above-referenced flood insurance study and as shown on the accompanying flood insurance rate map.~~
- ~~(3) The special floodplain hazard area district is those areas identified as either an AE zone or A1-30 zone on the maps accompanying the flood insurance study for which 100-year flood elevations have been provided but for which no floodway has been delineated.~~
- ~~(4) The approximated floodplain district is that floodplain area for which no detailed flood profiles or elevations are provided, but where a 100-year floodplain boundary has been approximated. These areas are shown as Zone A on the maps accompanying the flood insurance study. For these areas, the 100-year flood elevations with floodway information from federal, state and other acceptable sources will be used, when available. Where the specific 100-year flood elevation cannot be determined for this area using other sources of data, such as the U.S. Army Corps of Engineers floodplain information reports, U.S. geological survey flood-prone quadrangles, etc., then the applicant for the proposed use, development and/or activity must determine this elevation in accordance with hydrologic and hydraulic engineering techniques. Hydrologic and hydraulic analyses may be undertaken only by professional engineers or others of demonstrated qualifications, who are required to certify that the technical methods used correctly reflect currently accepted technical concepts. Studies, analyses, computations, etc., must be submitted in sufficient detail to allow a thorough review.~~

**B. Overlay concept.**

- ~~(1) The floodplain districts described above are overlays to the existing underlying districts as shown on the official zoning map, and as such, the provisions for the floodplain districts supplement the underlying district provisions.~~
- ~~(2) Where there is any conflict between the provisions or requirements of any of the floodplain districts and those of any underlying district, the more restrictive provisions apply.~~

**Sec. 15-456. Official map.**

~~The boundaries of the floodplain districts are established as shown on the flood insurance rate map, which is declared to be a part of this article. The flood insurance rate maps and dam break inundation zone maps will be kept on file at the community development department.~~

### **~~Sec. 15-457. 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 or where more detailed studies have been conducted or undertaken by the county, the U.S. Army Corps of Engineers or other qualified agency, or an individual documents the need for such change. However, prior to any change, approval must be obtained from the Federal Emergency Management Agency.~~

### **~~Sec. 15-458. Interpretation of district boundaries.~~**

~~Initial interpretations of the boundaries of the floodplain districts will be made by the zoning administrator, whose determination may be appealed to the board of zoning appeals.~~

### **~~Sec. 15-459. General provisions.~~**

- ~~A. *Development requirement.* Beyond the permitted uses identified in Sec. 15-460, all other uses, activities and developments occurring within any floodplain district must be undertaken only with a conditional use permit. Development must comply with this article and with all other applicable codes and ordinances, such as the Virginia Uniform Statewide Building Code and the county subdivision ordinance. Under no circumstances shall any use, activity, or development adversely affect the capacity of the channels or floodway or any watercourse, drainage ditch, or any other drainage facility or system.~~
- ~~B. *Alteration or relocation of watercourse.* Prior to any proposed elevation or relocation of any channels or of any watercourse, streams, etc., a permit must be obtained from the U.S. Army Corps of Engineers, the state water control board, and the state marine resources commission (a joint permit application is available from any of these organizations). Furthermore, notification of the proposal must be given by the applicant to all affected adjacent jurisdictions, the division of dam safety and floodplain management (department of conservation and recreation), and the Federal Emergency Management Agency, with proof of notice being provided to the zoning administrator. The flood-carrying capacity within an altered or relocated portion of any watercourse must be maintained.~~
- ~~C. *Site plans and permit applications.* All applications for development in the floodplain district or within a dam break inundation zone must include the following information:
  - ~~(1) Elevation of the lowest floor (including basement) shown at or above the base flood elevation.~~
  - ~~(2) For structures to be floodproofed (nonresidential only), the elevation to which the structure will be floodproofed.~~
  - ~~(3) The elevation of the 100-year flood.~~
  - ~~(4) Topographic information showing existing and proposed ground elevations.~~
  - ~~(5) Dam break inundation zone, if available.~~~~
- ~~D. *Preexisting and nonconforming structures.* A structure, or use of a structure or~~

~~premises which lawfully existed before the enactment of these provisions, but which is not in conformity with these provisions, may be continued subject to the following conditions:-~~

- ~~(1) Existing structures in the floodway district cannot be expanded or enlarged unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practices that the proposed expansion would not result in any increase in the base flood elevation.-~~
- ~~(2) Any modification, alteration, repair, reconstruction, or improvement of any kind to a structure and/or use located in any floodplain areas to an extent or amount of less than 50% of its market value must conform to the Virginia Uniform Statewide Building Code.-~~
- ~~(3) The modification, alteration, repair, reconstruction, or improvement of any kind to a structure and/or use, regardless of its location in a floodplain area, to an extent or amount of 50% or more of its market value can be undertaken only in full compliance with this article and the entire structure must conform to the Virginia Uniform Statewide Building Code.-~~

~~E. *Dam break inundation zones.* No land can be developed or subdivided within the boundaries of a mapped dam break inundation zone unless it complies with the provisions of Virginia Code § 10.1-606.3. If the state department of conservation and recreation determines that the development or subdivision would change the spillway design flood standards of the impounding structure, and the proposed subdivision would allow development of three or more units (commercial, industrial, or residential in use), the county cannot permit the subdivision unless:-~~

- ~~(1) The applicant agrees to alter the development so that it does not alter the spillway design flood standard required of the impounding structure; or~~
- ~~(2) The applicant contributes payment to construct the necessary upgrades to the affected impounding structure pursuant to Virginia Code § 15.2-2243.1.-~~

**~~Sec. 15-460. Uses and structures permitted by right (P) or conditional use permit (CUP).~~**

~~The following uses and activities are permitted provided that they are in compliance with the provisions of the underlying area, are not prohibited by any other ordinance, and do not require structures, fill, or storage of materials and equipment:-~~

<b><del>Principal Uses and Structures</del></b>	<b><del>P or CUP</del></b>
<del>Accessory use customarily and clearly incidental and subordinate to any use permitted by right-</del>	<del>CUP</del>
<del>Agricultural use, such as general farming, pasture, grazing, outdoor plant nurseries, horticulture, truck farming, forestry, sod farming, and wild crop harvesting-</del>	<del>P</del>
<del>Accessory residential use, such as yard areas, garden, play area, and pervious loading areas-</del>	<del>P</del>

Carnival; circus; fair; any similar transient amusement enterprise	CUP
Commercial and industrial structures and use, including warehousing, which may require railroad frontage, provided they are located so as not to impede the flow of floodwaters pursuant to Sec. 15-464. Earthen or other fill material or nonresidential elevated structures may be utilized so long as the purpose and intent of Sec. 15-464 are upheld. Nonresidential structures located in the 100-year floodplain must satisfy the performance standards of the Virginia Uniform Statewide Building Code and Sec. 15-464.	CUP
Commercial campground	CUP
Front, side and rear yard of use permitted in an adjoining district when expressly permitted by this article and other county ordinances	CUP
Game farm; fish hatchery (excluding rearing structure); hunting and fishing reserves; boat landing	P
Gas transmission line	CUP
Hunting; fishing	P
Office quarters housed in a temporary structure such as a mobile home or trailer which may be readily towed or otherwise removed from the flood fringe prior to inundation by floodwaters	CUP
Outlet installation for sewage treatment plant; sealed public or private water supply well	P
Park; playground; day camp; picnic ground; golf course; golf driving range; miniature golf course; yacht club	CUP
Paved off-street parking, or loading and unloading area related to a use in an adjoining district	CUP
Public park; public recreational facility	P
Public and commercial swimming pool	CUP
Public utility distribution facility	P
Public utility transmission line (including liquid and natural gas), transmission tower, pipe, meter, railroad	CUP
Pulpwood receiving and storage yard, wood shipping scale, scalehouse, pumping station, and loading dock, provided these structures do not impede the flow of floodwaters or restrict the flow of debris	CUP
Retaining wall; channel improvement; flood retention dam and levee; culvert and bridge; all approved by state department of highways	P

<del>Roadside stand for the sale of fish bait, or agricultural or horticultural products produced on the premises-</del>	CUP
<del>Sand and gravel pit; quarry; soil removal; mining operation; all in accordance with Sec. 15-283.F-</del>	CUP
<del>Structure customarily accessory and clearly incidental and subordinate to agricultural uses; park, playground, day camp, picnic ground, golf course/driving range, yacht club; sand and gravel pit and quarry, soil removal, mining operation; and commercial campground-</del>	CUP
<del>Wildlife preserve; conservation area; woodland preserve; arboretum-</del>	P

**~~Sec. 15-461. Prohibited uses and structures.~~**

- ~~A. Any use or structure not of a character indicated under uses and structures permitted by right or with a conditional use permit.-~~
- ~~B. Manufactured homes.-~~
- ~~C. Filling in with dirt, gravel, minerals or refuse, or regrading of land in a floodplain in any manner that would obstruct, interfere, or otherwise adversely affect flow patterns and currents during flooding.-~~
- ~~D. Private package sewage treatment plants, including conventional and alternative onsite septic systems.-~~

**~~Sec. 15-462. Design criteria for utilities and facilities.~~**

- ~~A. *Sanitary sewer facility.* All new or replacement sanitary sewer facilities (including all pumping stations and collector systems) must 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. *Onsite septic systems.* All new or replacement onsite waste disposal systems must be located and constructed to avoid impairment to them or contamination from them during flooding.-~~
- ~~C. *Water facilities.* All new or replacement water facilities must be designed to minimize or eliminate infiltration of floodwaters into the system and be located and constructed to minimize or eliminate flood damages.-~~
- ~~D. *Drainage facilities.* All storm drainage facilities must be designed to convey the flow of surface waters without damage to persons or property. The systems must ensure drainage away from buildings and onsite waste disposal sites.-~~
- ~~E. *Utilities.* All utilities, such as gas lines, or electrical and telephone systems, being placed in floodprone areas should be elevated, where possible, and constructed to minimize the chance of impairment during a flooding occurrence.-~~

- F. ~~Streets and sidewalks.~~ Streets and sidewalks should be designed to minimize their potential for increasing and aggravating the levels of flood flow. Drainage openings are required to sufficiently discharge flood flows without unduly increasing flood heights.

**Sec. 15-463. Area regulations.**

The minimum lot area for each permitted use is eight acres; provided, however, this requirement does not apply to off-street parking, loading or unloading, and front, side and rear yard of uses permitted in an adjoining district. Maximum lot coverage by all structures cannot exceed 5% of total lot area.

**Sec. 15-464. Special requirements applicable to floodplain districts.**

- A. ~~Flood flow not to be obstructed.~~ Any provisions to the contrary notwithstanding, no use or structure is permitted in any floodplain if it will adversely affect normal flood flow, or will increase flooding of lands above or below the property, or will increase erosion within or adjoining the floodplain, or will cause diversion of floodwaters in a manner more likely to create damage than does flow in a normal course, or will increase peak flows or velocities in a manner likely to lead to added property damage or hazards to life, or will increase amounts of damaging materials (including those likely to be injurious to health) which might be carried downstream in floods.
- B. ~~Obstruction minimized; safety maximized.~~ Every structure permitted in floodplains must be located, elevated, and constructed to resist flotation and to offer minimum obstruction to flood flow. The ground floor level of every dwelling must be a minimum of three feet above the 100-year floodplain. No use is permitted if it will increase the amounts of potentially damaging materials, including those likely to be injurious to health, which might be carried downstream in floods.
- C. ~~Floodway district.~~ No encroachments, including fill, new construction, substantial improvements, or other development are permitted unless it has been demonstrated, through hydrologic and hydraulic analyses performed in accordance with standard engineering practices, that the proposed encroachment would not result in any increase in the 100-year flood elevation.
- D. ~~Flood fringe and approximated floodplain districts.~~ When base flood elevation data or floodway data has not been provided, the zoning administrator will obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal or state agency, or any other source, in order to administer the provisions under this section and those under Sec. 15-459.

**Sec. 15-465. Additional factors to satisfy conditional use permits and variances.**

In approving applications for conditional use permits, the board of supervisors and, for variances, the board of zoning appeals must satisfy all relevant factors and procedures specified in other sections of this ordinance and the following factors:

- A. ~~The danger to life and property due to increased flood heights or velocities caused by encroachments.~~ No conditional use permit or variance may be granted for any proposed use, development, or activity within the floodway

- district that will cause any increase in flood levels during the 100-year flood.
- ~~B. The danger that materials may be swept onto other lands or downstream to the injury of others.~~
  - ~~C. The proposed water supply and sanitation systems and the ability of these systems to prevent disease, contamination, and unsanitary conditions.~~
  - ~~D. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owners.~~
  - ~~E. The importance of the services provided by the proposed facility to the community.~~
  - ~~F. The facility's need for a waterfront location.~~
  - ~~G. The availability of alternative locations not subject to flooding for the proposal use.~~
  - ~~H. The compatibility of the proposed use with existing development and development anticipated in the foreseeable future.~~
  - ~~I. The relationship of the proposed use to the comprehensive plan.~~
  - ~~J. The safety of access to the property in time of flood of ordinary and emergency vehicles.~~
  - ~~K. The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters expected at the site.~~
  - ~~L. Such other factors which are relevant to the purposes of this article.~~
  - ~~M. The board of supervisors and/or the board of zoning appeals may obtain the services of 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.~~
  - ~~N. Conditional use permits and variances can be issued only after it has been determined that the granting of them will not result in:
    - ~~(1) Unacceptable or prohibited increases in flood heights;~~
    - ~~(2) Additional threats to public safety;~~
    - ~~(3) Extraordinary public expense;~~
    - ~~(4) Nuisances;~~
    - ~~(5) Fraud or victimization of the public; or~~
    - ~~(6) Conflict with local laws or ordinances.~~~~
  - ~~O. Variances should only be issued if they will provide the minimum relief to exceptional hardship.~~
  - ~~P. An applicant who obtains approval to construct a structure below the 100-year flood elevation must be notified that it:~~

- (1) Increases risks to life and property; and
  - (2) Will result in increased premium rates for flood insurance.
- Q. A record of the notification to the application, and a record of all conditional use permits or variances, including justification for their issuance, must be maintained and noted in the annual report submitted to the Federal Emergency Management Agency.

### **Sec. 15-466. Appeals.**

Original determinations under this article, including questions or the boundaries of the flood hazard district, will be made by the zoning administrator. The boundaries can be validated by detailed on-site surveys approved by the Federal Emergency Management Agency. In rendering decisions under this article, the board of zoning appeals shall consider, in addition to other evidence and standards, the findings and recommendations of the monacan soil and water conservation district directors and staff, and the recommendations of the planning commission and other appropriate agencies. In any appeal procedure, both the property owner, at his expense, and the county or any other of its agencies or agents, will have the right to conduct on-site surveys and other studies, and present testimony and evidence of them to the zoning administrator and to the board of zoning appeals.

The board of zoning appeals may require the applicant to submit to it engineering or other studies, prepared by competent engineers or other technical persons, when such information is needed to determine the effects of flooding on a proposed structure or use.

The approximated floodplain district is that floodplain area for which no detailed flood profiles or elevations are provided, but where a 100-year floodplain boundary has been approximated. These areas are shown on the flood boundary and floodway map. Where the specific 100-year flood elevation cannot be determined for the area using other sources of data such as the U.S. Army Corps of Engineers, flood plain information reports, U.S. geological survey flood-prone quadrangles, etc., the applicant for the proposed use, development and/or activity must determine this elevation in accordance with hydrologic and hydraulic engineering techniques. Hydrologic and hydraulic analyses can 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. Studies, analyses, computations, etc., must be submitted in sufficient detail to allow a thorough review by the board of zoning appeals.

### **Secs. 15-467-15-480. Reserved.**

### **Sec. 15-451. Statement of intent.**

Virginia Code § 15.2-2283 specifies that zoning ordinances shall be for the general purpose of promoting the health, safety, or general welfare of the public and of further accomplishing the objectives of § 15.2-2200, which encourages localities to improve the public health, safety, convenience, and welfare of their citizens. To these ends, this flood ordinance is designed to provide for safety from flood, to facilitate the provision of flood protection, and to protect against loss of life, health, or property from flood, and is

specifically adopted pursuant to the authority granted to localities by Virginia Code § 15.2-2280.

Accordingly, these regulations are intended to protect areas of floodplain necessary for floodwaters, and to permit and encourage the retention of open land uses located and designed to constitute a harmonious and appropriate part of the physical development of the county as provided for in the comprehensive plan. In advancing these principles, the specific purpose of the floodplain districts is to minimize and reduce the loss of life and property, reduce health and safety hazards, avoid disruption of commerce and governmental services, and eliminate the extraordinary and unnecessary expenditure of public funds for flood protection and relief, or the impairment of the tax base by:

- A. Regulating uses, activities, and developments which, along or in combination with other existing or future uses, activities, and development, will cause unacceptable increases in flood heights, velocities, and frequencies.
- B. Restricting or prohibiting certain uses, activities, and developments from locating within districts subject to flooding.
- C. Requiring all those uses, activities, and developments that occur in flood-prone districts to be protected and/or floodproofed against flooding and flood damage.
- D. Protecting individuals from buying land and structures which are unsuitable for intended purposes because of flood hazards.
- E. Protecting individuals from the impacts within dam break inundation zones from failure of impounding structures.

### **Sec. 15-452. Applicability.**

These provisions apply to all lands within the county identified as special flood hazard areas (SFHAs) as shown on the flood insurance rate maps (FIRMs) or included in the flood insurance study (FIS) for Goochland County prepared by the Federal Emergency Management Agency, dated October 10, 2024.

### **Sec. 15-453. Administration.**

- A. Designation of the floodplain administrator. The director of community development is appointed to administer and implement these regulations and is referred to herein as the floodplain administrator. The floodplain administrator may:
  - (1) Do the work themselves. In the absence of a designated floodplain administrator, the duties will be conducted by the county administrator.
  - (2) Delegate duties and responsibilities set forth in these regulations to qualified technical personnel, plan examiners, inspectors, and other employees.
  - (3) Enter into a written agreement or written contract with another community or private sector entity to administer specific provisions of these regulations. Administration of any part of these regulations by another entity does not

relieve the community of its responsibilities pursuant to the participation requirements of the National Flood Insurance Program (NFIP) as set forth in the Code of Federal Regulations at 44 C.F.R. Section 59.22.

B. Duties and responsibilities of the floodplain administrator. The duties and responsibilities of the floodplain administrator include but are not limited to:

- (1) Review applications for permits to determine whether proposed activities will be located in the Special Flood Hazard Area (SFHA).
- (2) Interpret floodplain boundaries and provide available base flood elevation and flood hazard information.
- (3) Review applications to determine whether proposed activities will be reasonably safe from flooding and require new construction and substantial improvements to meet the requirements of these regulations.
- (4) Review applications to determine whether all necessary permits have been obtained from the Federal, State, or local agencies from which prior or concurrent approval is required; in particular, permits from state agencies for any construction, reconstruction, repair, or alteration of a dam, reservoir, or waterway obstruction (including bridges, culverts, structures), any alteration of a watercourse, or any change of the course, current, or cross section of a stream or body of water, including any change to the base flood elevation of free-flowing non-tidal waters of the State.
- (5) Verify that applicants proposing an alteration of a watercourse have notified adjacent communities, the Department of Conservation and Recreation (Division of Dam Safety and Floodplain Management), and other appropriate agencies (VADEQ, USACE), and have submitted copies of such notifications to FEMA.
- (6) Approve applications and issue permits to develop in special flood hazard areas if the provisions of these regulations have been met or disapprove applications if the provisions of these regulations have not been met.
- (7) Inspect or cause to be inspected, buildings, structures, and other development for which permits have been issued to determine compliance with these regulations or to determine if non-compliance has occurred or violations have been committed.
- (8) Review elevation certificates and require incomplete or deficient certificates to be corrected.
- (9) Submit to FEMA, or require applicants to submit to FEMA, data and information necessary to maintain FIRMs, including hydrologic and hydraulic engineering analyses prepared by or for Goochland County within six months after such data and information becomes available if the analyses indicate changes in base flood elevations.
- (10) Maintain and permanently keep records that are necessary for the administration of these regulations, including:

- a. Flood Insurance Studies, Flood Insurance Rate Maps (including historic studies and maps and current effective studies and maps), and Letters of Map Change; and
  - b. Documentation supporting issuance and denial of permits, elevation certificates, documentation of the elevation (in relation to the datum on the FIRM) to which structures have been floodproofed, inspection records, other required design certifications, variances, and records of enforcement actions taken to correct violations of these regulations.
- (11) Enforce the provisions of these regulations, investigate violations, issue notices of violations or stop work orders, and require permit holders to take corrective action.
- (12) Advise the Board of Zoning Appeals regarding the intent of these regulations and, for each application for a variance, prepare a staff report and recommendation.
- (13) Administer the requirements related to proposed work on existing buildings:
- a. Make determinations as to whether buildings and structures that are located in special flood hazard areas and that are damaged by any cause have been substantially damaged.
  - b. Make reasonable efforts to notify owners of substantially damaged structures of the need to obtain a permit to repair, rehabilitate, or reconstruct. Prohibit the non-compliant repair of substantially damaged buildings except for temporary emergency protective measures necessary to secure a property or stabilize a building or structure to prevent additional damage.
- (14) Undertake, as determined appropriate by the floodplain administrator due to the circumstances, other actions which may include but are not limited to: issuing press releases, public service announcements, and other public information materials related to permit requests and repair of damaged structures; coordinating with other Federal, State, and local agencies to assist with substantial damage determinations; providing owners of damaged structures information related to the proper repair of damaged structures in special flood hazard areas; and assisting property owners with documentation necessary to file claims for Increased Cost of Compliance coverage under NFIP flood insurance policies.
- (15) Notify FEMA when the jurisdictional boundaries of Goochland County have been modified and:
- a. Provide a map that clearly delineates the new boundaries or the new area for which the authority to regulate pursuant to these regulations has either been assumed or relinquished through annexation; and
  - b. If the FIRM for any annexed area includes special flood hazard areas that have flood zones that have regulatory requirements that are not set

forth in these regulations, prepare amendments to these regulations to adopt the FIRM and appropriate requirements, and submit the amendments to the governing body for adoption; such adoption shall take place at the same time as or prior to the date of annexation and a copy of the amended regulations shall be provided to Department of Conservation and Recreation (Division of Dam Safety and Floodplain Management) and FEMA.

(16) Upon the request of FEMA, complete and submit a report concerning participation in the NFIP which may request information regarding the number of buildings in the SFHA, number of permits issued for development in the SFHA, and number of variances issued for development in the SFHA.

(17) Take into account flood, mudslide, and flood-related erosion hazards, to the extent that they are known, in all official actions relating to land management and use throughout the entire jurisdictional area of the Community, whether or not those hazards have been specifically delineated geographically (e.g. via mapping or surveying).

C. Use and Interpretation of FIRMs. The floodplain administrator will make interpretations, where needed, as to the exact location of special flood hazard areas, floodplain boundaries, and floodway boundaries as follows:

(1) Where field surveyed topography indicates that adjacent ground elevations:

a. Are below the base flood elevation in riverine SFHAs, or below the 1% storm surge elevation in coastal SFHAs, even in areas not delineated as a special flood hazard area on a FIRM, the area will be considered as special flood hazard area and subject to the requirements of these regulations.

b. Are above the base flood elevation and the area is labelled as a SFHA on the FIRM, the area will be regulated as special flood hazard area unless the applicant obtains a Letter of Map Change that removes the area from the SFHA.

(2) In FEMA-identified special flood hazard areas where base flood elevation and floodway data have not been identified and in areas where FEMA has not identified SFHAs, any other flood hazard data available from a Federal, State, or other source will be reviewed and reasonably used.

(3) Base flood elevations and designated floodway boundaries on FIRMs and in FISs take precedence over base flood elevations and floodway boundaries by any other sources if such sources show reduced floodway widths and/or lower base flood elevations.

(4) Other sources of data will be reasonably used if such sources show increased base flood elevations and/or larger floodway areas than are shown on FIRMs and in FISs.

(5) If a Preliminary Flood Insurance Rate Map and/or a Preliminary Flood Insurance Study has been provided by FEMA:

- a. Upon the issuance of a Letter of Final Determination by FEMA, the preliminary flood hazard data will be used and will replace the flood hazard data previously provided from FEMA for the purposes of administering these regulations.
- b. Prior to the issuance of a Letter of Final Determination by FEMA, the use of preliminary flood hazard data will be deemed the best available data pursuant to Section 15-456.A.(4) and used where no base flood elevations and/or floodway areas are provided on the effective FIRM.
- c. Prior to issuance of a Letter of Final Determination by FEMA, the use of preliminary flood hazard data is permitted where the preliminary base flood elevations or floodway areas exceed the base flood elevations and/or designated floodway widths in existing flood hazard data provided by FEMA. Such preliminary data may be subject to change and/or appeal to FEMA.
- d. Jurisdictional Boundary Changes. The County floodplain ordinance in effect on the date of annexation will remain in effect and be enforced by the municipality for all annexed areas until the municipality adopts and enforces an ordinance which meets the requirements for participation in the National Flood Insurance Program (NFIP). Municipalities with existing floodplain ordinances shall pass a resolution acknowledging and accepting responsibility for enforcing floodplain ordinance standards prior to annexation of any area containing identified flood hazards. If the FIRM for any annexed area includes special flood hazard areas that have flood zones that have regulatory requirements that are not set forth in these regulations, the governing body shall prepare amendments to these regulations to adopt the FIRM and appropriate requirements, and submit the amendments to the governing body for adoption; such adoption must take place at the same time as or prior to the date of annexation and a copy of the amended regulations must be provided to Department of Conservation and Recreation (Division of Dam Safety and Floodplain Management) and FEMA.

In accordance with the Code of Federal Regulations, Title 44 Subpart (B) Section 59.22(a)(9)(v) all NFIP participating communities must notify the Federal Insurance Administration and optionally the State Coordinating Office in writing whenever the boundaries of the community have been modified by annexation or the community has otherwise assumed or no longer has authority to adopt and enforce floodplain management regulations for a particular area.

In order that all Flood Insurance Rate Maps (FIRMs) accurately represent the community's boundaries, a copy of a map of the community suitable for reproduction, clearly delineating the new jurisdictional limits or new area for which the community has assumed or relinquished floodplain management regulatory authority must be

included with the notification.

**Sec. 15-454. Compliance, penalty for violations, and liability.**

- A. No land can be developed and no structure can 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 which apply to uses within the jurisdiction of this article.
- B. The degree of flood protection sought by the provisions of this ordinance is considered reasonable for regulatory purposes and is based on acceptable engineering methods of study, but does not imply total flood protection. Larger floods may occur on rare occasions. Flood heights may be increased by man-made or natural causes, such as ice jams and bridge openings restricted by debris. This ordinance does not imply that districts outside the floodplain district or land uses permitted within such district will be free from flooding or flood damages.
- C. Any person who fails to comply with any of the requirements or provisions of this article or directions of the director of community development or any authorized employee of Goochland County is guilty of the appropriate violation and subject to the penalties thereof.
- D. The Virginia Uniform Statewide Building Code (VA USBC) addresses building code violations and the associated penalties in Section 104 and Section 115. Zoning violations and associated penalties are addressed in Section 15-52 of the County Zoning Ordinance.
- E. In addition to the above penalties, all other actions are hereby reserved, including an action in equity for the proper enforcement of this article. The imposition of a fine or penalty for any violation of, or noncompliance with, this article does not excuse the violation or noncompliance or permit it to continue; and all such persons will be required to correct or remedy such violations within a reasonable time. Any structure constructed, reconstructed, enlarged, altered, or relocated in noncompliance with this article may be declared by the County to be a public nuisance and abatable as such. Flood insurance may be withheld from structures constructed in violation of this article.
- F. This article does not create liability on the part of the county or any of its officers or employees for any flood damages that result from reliance on this article, or any administrative decision lawfully made thereunder. This article does not imply that districts outside the floodplain district, or that land uses permitted within the floodplain district, will be free from flooding or flood damages.

**Sec. 15-455. Definitions.**

The following words and phrases mean the following for this article:

- A. Appurtenant or accessory structure. A non-residential structure located on the same parcel of property as the principal structure and the use of which is incidental to the use of the principal structure. Accessory structures may not exceed 600 square feet.
- B. Base flood. The flood having a one percent (1%) chance of being equaled or exceeded in any given year.
- C. Base flood elevation (BFE). The water surface elevations of the base flood in relation to the datum specified on the community's Flood Insurance Rate Map (FIRM). For purposes of this ordinance, the base flood is the 1% annual chance flood.
- D. Basement. Any area of the building having its floor subgrade (below ground level) on all sides.
- E. Dam Break Inundation zone. The area downstream of a dam that would be inundated or otherwise directly affected by the failure of a dam.
- F. Development. Any manmade change to improved or unimproved real estate including, but not limited to, buildings or other structures, temporary structures, mining, dredging, filling, grading, paving, excavation or drilling operations, or other land-disturbing activities or permanent or temporary storage of equipment or materials.
- G. Elevated building. For insurance purposes, a no basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns.
- H. Elevation Certificate. An administrative tool used by the NFIP to provide elevation information necessary to ensure compliance with community floodplain management ordinances; to inform mitigation actions that will lower flood risk; and/or support a request for a LOMA to remove a building from a high-risk flood area. The elevation certificate lists a building's location, lowest point of elevation, flood zone, and other characteristics.
- I. Encroachment. The advance or infringement of uses, plant growth, fill, excavation, buildings, permanent structures, or development into a floodplain, which may impede or alter flow capacity of a floodplain.
- J. Existing construction. Structures for which the "start of construction" commenced before the effective date of the community's first FIRM or before January 1, 1975 for FIRMs effective before that date. "Existing construction" may also be referred to as "existing structures" and "pre-FIRM."
- K. Flood or flooding.
- (1) A general and temporary condition of partial or complete inundation of normally dry land areas from:
    - a. The overflow of inland waters; or
    - b. The unusual and rapid accumulation or runoff of surface waters from any source; or

c. Mudflow - a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water.

(2) The collapse or subsidence of land along the shore of a lake or similar body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels; or suddenly caused by an unusually high water level in a natural body of water due to a severe storm; or by an unanticipated force of nature, such as a flash flood; or by some similarly unusual and unforeseeable event that results in a flood.

L. Flood Fringe district. The portion of an AE zone, where the floodway has been determined, that is located outside the limits of the floodway. It contains areas that are at or below the base flood elevation, that store but do not effectively convey the floodwaters. The basis for the outermost boundary of this district is the base flood elevations contained in the flood profiles of the herein-referenced flood insurance study (FIS) and as shown on the accompanying flood insurance rate map (FIRM).

M. Flood Insurance Rate Map (FIRM). An official map of a community, on which the Federal Emergency Management Agency (FEMA) has delineated both the special hazard areas and the risk premium zones applicable to the community. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).

N. Flood Insurance Study (FIS). A report by FEMA that examines, evaluates, and determines flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation, and determination of mudflow and/or flood-related erosion hazards.

O. Floodprone area. Any land area susceptible to being inundated by water from any source.

P. Floodplain.

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

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

Q. Floodproofing. Any combination of structural and non-structural additions, changes, or adjustments to structures that reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

R. Floodway. The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot at any point within the community.

S. Freeboard. A factor of safety usually expressed in feet above a flood level for purposes of floodplain management. "Freeboard" tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, bridge openings, and the hydrological effect of urbanization of the watershed.

T. Functionally dependent use. A use that cannot perform its intended purpose unless it is located or carried out in close proximity to water. This term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and shipbuilding and ship repair facilities, but does not include long-term storage or related manufacturing facilities.

U. Highest adjacent grade. The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

V. Historic structure. Any structure that is:

- (1) Listed individually in the department of interior's national register of historic places, or preliminarily determined by the secretary of the interior as meeting the requirements for individual listing on the national register; or
- (2) Certified or preliminarily determined by the secretary of interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the secretary to qualify as a registered historic district; or
- (3) Individually listed on the state inventory of historic places.

W. Hydrologic and Hydraulic Engineering Analysis. Analyses performed by a Commonwealth of Virginia licensed professional engineer, in accordance with standard engineering practices that are accepted by the Virginia Department of Conservation and Recreation and FEMA, used to determine the base flood, other frequency floods, flood elevations, floodway information and boundaries, and flood profiles.

X. Impounding Structure or Dam. A man-made structure, whether a dam across a watercourse or structure outside a watercourse, used or to be used to retain or store waters or other materials. The term includes: (i) all dams that are 25 feet or greater in height and that create an impoundment capacity of 15 acre-feet or greater, and (ii) all dams that are six feet or greater in height and that create an impoundment capacity of 50 acre-feet or greater. The term "impounding structure" does not include: (a) dams licensed by the State Corporation Commission that are subject to a safety inspection program; (b) dams owned or licensed by the United States government; (c) dams operated primarily for agricultural purposes which are less than 25 feet in height or which create a maximum impoundment capacity smaller than 100 acre-feet; (d) water or silt

retaining dams approved pursuant to § 45.1-222 or 45.1- 225.1 of the Code of Virginia; or (e) obstructions in a canal used to raise or lower water.

Y. Letters of Map Change (LOMC). A Letter of Map Change is an official FEMA determination, by letter, that amends or revises an effective Flood Insurance Rate Map (FIRM) or Flood Insurance Study (FIS). Letters of Map Change include:

(1) Letter of Map Amendment (LOMA). An amendment based on technical data showing that a property was incorrectly included in a designated special flood hazard area. A LOMA amends the current effective Flood Insurance Rate Map (FIRM) and establishes that a land as defined by meets and bounds or structure is not located in a special flood hazard area.

(2) Letter of Map Revision (LOMR). A revision based on technical data that may show changes to flood zones, flood elevations, floodplain and floodway delineations, and planimetric features. A Letter of Map Revision Based on Fill (LOMR-F), is a determination that a structure or parcel of land has been elevated by fill above the base flood elevation and is, therefore, no longer exposed to flooding associated with the base flood. In order to qualify for this determination, the fill must have been permitted and placed in accordance with the community's floodplain management regulations.

(3) Conditional Letter of Map Revision (CLOMR). A formal review and comment as to whether a proposed flood protection project or other project complies with the minimum NFIP requirements for such projects with respect to delineation of special flood hazard areas. A CLOMR does not revise the effective Flood Insurance Rate Map (FIRM) or Flood Insurance Study (FIS).

Z. Lowest adjacent grade. The lowest natural elevation of the ground surface next to the walls of a structure.

AA. Lowest floor. The lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for vehicle parking, building access, or storage in an area other than a basement is not considered a building's lowest floor; provided, that the enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of 44 CFR § 60.3.

BB. Manufactured home. A structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For floodplain management purposes the term "manufactured home" also includes park trailers, travel trailers, and other similar vehicles placed on a site for greater than 180 consecutive days.

CC. Manufactured home park or subdivision. A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

DD. Mean Sea Level. For purposes of the National Flood Insurance Program (NFIP), the National Geodetic Vertical Datum (NGVD) of 1929 or the North American Vertical Datum (NAVD) of 1988 to which base flood elevations shown on a community's FIRM are referenced.

EE. New construction. Structures for which the "start of construction" commenced on or after the effective start date of this floodplain management ordinance and includes any subsequent improvements to such structures. Any construction started after effective date of community's first floodplain management ordinance adopted by the community and before the effective start date of this floodplain management ordinance is subject to the ordinance in effect at the time the permit was issued, provided the start of construction was within 180 days of permit issuance.

FF. Post-FIRM structures. A structure for which construction or substantial improvement occurred on or after March 1, 1979.

GG. Pre-FIRM structures. A structure for which construction or substantial improvement occurred before March 1, 1979.

HH. Recreational vehicle. A vehicle which is:

- (1) Built on a single chassis;
- (2) 400 square feet or less when measured at the largest horizontal projection;
- (3) Designed to be self-propelled or permanently towable by a light duty truck;  
and,
- (4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational camping, travel, or seasonal use.

II. Repetitive Loss Structure. A building covered by a contract for flood insurance that has incurred flood-related damages on two occasions in a 10-year period, in which the cost of the repair, on the average, equaled or exceeded 25 percent of the market value of the structure at the time of each such flood event; and at the time of the second incidence of flood-related damage, the contract for flood insurance contains increased cost of compliance coverage.

JJ. Severe repetitive loss structure. A structure that: (a) Is covered under a contract for flood insurance made available under the NFIP; and (b) Has incurred flood related damage - (i) For which 4 or more separate claims payments have been made under flood insurance coverage with the amount of each such claim exceeding \$5,000, and with the cumulative amount of such claims payments exceeding \$20,000; or (ii) For which at least 2 separate claims payments have been made under such coverage, with the cumulative amount of such claims exceeding the market value of the insured structure.

KK. Shallow flooding area. A special flood hazard area with base flood depths from one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

LL. Special flood hazard area (SFHA). The land in the floodplain subject to a one

percent (1%) or greater chance of flooding in any given year as determined in Sec. 14-456 of this ordinance.

MM. *Start of construction.* The date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site (such as the pouring of a slab or footings), the installation of piles, the construction of columns, or any work beyond the state of excavation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations, or the erection of temporary forms; nor does it include the installation of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main building. For a substantial improvement, the actual start of construction means the first alteration on any wall, ceiling, floor, or other structural part of a building, even if the alteration does not affect the external dimensions of the building.

NN. *Structure.* For floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.

OO. *Substantial damage.* 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% of the market value of the structure before the damage occurred. It also means flood-related damages sustained by a structure on two occasions in a 10-year period, in which the cost of the repair, on the average, equals or exceeds 25 percent of the market value of the structure at the time of each such flood event.

PP. *Substantial improvement.* Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50% of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage" regardless of the actual repair work performed. The term does not, however, include either:

- (1) any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety codes which have been identified by a code enforcement official and which are the minimum necessary to assure safe living conditions, or
- (2) any alteration of an "historic structure," provided that the alteration will not preclude the structure's continued designation as an historic structure. \_
- (3) Historic structures undergoing repair or rehabilitation that would constitute a substantial improvement as defined above, must comply with all ordinance requirements that do not preclude the structure's continued designation as a historic structure. Documentation that a specific ordinance

requirement will cause removal of the structure from the National Register of Historic Places or the State Inventory of Historic Places must be obtained from the Secretary of the Interior or the State Historic Preservation Officer. Any exemption from ordinance requirements will be the minimum necessary to preserve the historic character and design of the structure.

QQ. Violation. The failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this ordinance is presumed to be in violation until such time as the documentation is provided.

RR. Watercourse. A lake, river, creek, stream, wash, channel or other topographic feature on or over which waters flow at least periodically. Watercourse includes specifically designated areas in which substantial flood damage may occur.

### **Sec. 15-456. Establishment of floodplain districts.**

A. Basis of districts. The following floodplain districts are hereby established based on the flood insurance study (FIS) and the flood insurance rate maps (FIRM) for the county prepared by the Federal Emergency Management Agency (FEMA), dated October 10, 2024, and any subsequent revisions or amendments thereto.

The boundaries of the floodplain districts are established as shown on the FIRM, which is declared to be a part of this ordinance and which is kept on file at the Goochland County Community Development office.

(1) The floodway district is located within an AE zone and is delineated for purposes of this article using the criteria that a certain area within the floodplain must be capable of carrying the waters of the base flood without increasing the water surface elevation of that flood more than one (1) foot at any point. The areas included in this district are specifically defined in Table 23 of the above referenced flood insurance study (FIS) and shown on the accompanying flood insurance rate map (FIRM).

The following provisions apply within the floodway district of an AE zone:

a. Within any floodway area, no encroachments, including fill, new construction, substantial improvements, or other development will be permitted unless it has been demonstrated through hydrologic and hydraulic analysis performed in accordance with standard engineering practice that the proposed encroachment will not result in any increase in flood levels within the community during the occurrence of the base flood discharge. Hydrologic and hydraulic analyses must be undertaken only by professional engineers or others of demonstrated qualifications, who must certify that the technical methods used correctly reflect currently accepted technical concepts. Studies, analyses, computations, etc., must be submitted in sufficient detail to allow a thorough review by the floodplain administrator.

Development activities that increase the water surface elevation of the base flood may be allowed provided that the applicant first applies, with Gochland County's endorsement, for a Conditional Letter of Map Revision (CLOMR), and receives FEMA approval.

If the requirements of this section are satisfied, then all new construction and substantial improvements must comply with all applicable flood hazard reduction provisions of Sec. 15-462.

b. The placement of manufactured homes (mobile homes) is prohibited.

(2) The flood fringe district is that portion of an AE zone with a designated floodway, that is not included in the floodway district. The basis for the outermost boundary of this district shall be the base flood elevations contained in the flood profiles of the above-referenced flood insurance study (FIS) and as shown on the accompanying flood insurance rate map (FIRM).

(3) The approximated floodplain district, designated as Zone A, is that floodplain area for which no detailed flood profiles or elevations are provided, but where a base flood boundary has been approximated. These areas are shown as Zone A on the maps accompanying the flood insurance study (FIS). For these areas, the base flood elevations with floodway information from federal, state, and other acceptable sources will be used, when available. Where the specific base flood elevation cannot be determined for this area using other sources of data, such as the U.S. Army Corps of Engineers floodplain information reports, U.S. geological survey flood-prone quadrangles, etc., then the applicant for the proposed use, development and/or activity must determine this elevation in accordance with hydrologic and hydraulic engineering techniques. Hydrologic and hydraulic analyses may be undertaken only by professional engineers or others of demonstrated qualifications, who are required to certify that the technical methods used correctly reflect currently accepted technical concepts. Studies, analyses, computations, etc., must be submitted in sufficient detail to allow a thorough review.

The floodplain administrator reserves the right to require a hydrologic and hydraulic analysis for any development. When such base flood elevation data is utilized, the lowest floor must be elevated as specified in Sec. 15-462.E.

During the permitting process, the floodplain administrator shall obtain:

- a. The elevation of the lowest floor (in relation to mean sea level), including the basement, of all new and substantially improved structures; and,
- b. If the structure has been floodproofed in accordance with the

requirements of this article, the elevation (in relation to mean sea level) to which the structure has been floodproofed.

Base flood elevation data must be obtained from other sources or developed using detailed methodologies comparable to those contained in a FIS for subdivision proposals and other proposed development proposals (including manufactured home parks and subdivisions) that exceed fifty lots or five acres, whichever is the lesser.

**B. Overlay concept.**

- (1) The floodplain districts described above are overlays to the existing underlying zoning districts as shown on the County's official zoning map, and as such, the provisions for the floodplain districts supplement the underlying zoning district provisions.
- (2) Where there is any conflict between the provisions or requirements of any of the floodplain districts and those of any underlying zoning district, the more restrictive provisions apply.
- (3) In the event 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 will remain applicable.

**Sec. 15-457. Official map.**

The boundaries of the floodplain districts are established as shown on the flood insurance rate map (FIRM), which is declared to be a part of this article. The flood insurance rate maps and dam break inundation zone maps will be kept on file at the community development department.

**Sec. 15-458. 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 or where more detailed studies have been conducted or undertaken by the county, the U.S. Army Corps of Engineers or other qualified agency, or an individual documents the need for such change. However, prior to any change, approval must be obtained from FEMA.

**Sec. 15-459. Interpretation of district boundaries.**

Interpretations of the floodplain district boundaries will be made by the floodplain administrator, whose determination may be appealed to the board of zoning appeals.

**Sec. 15-460. Submitting Model Backed Technical Data**

A community's base flood elevations may increase or decrease resulting from physical changes affecting flooding conditions. As soon as practicable, but not later than six months after the date such information becomes available, a community shall notify

FEMA of the changes by submitting technical or scientific data. The community may submit data via a LOMR. Such a submission is necessary so that upon confirmation of those physical changes affecting flooding conditions, risk premium rates and floodplain management requirements will be based upon current data.

### **Sec. 15-461. Letters of Map Revision**

When development in the floodplain will cause or causes a change in the base flood elevation, the applicant, including state agencies, must notify FEMA by applying for a Conditional Letter of Map Revision (CLOMR) and then a Letter of Map Revision (LOMR).

### **Sec. 15-462. General provisions.**

- A. Permit requirements. Development in a floodplain district must comply with this article and other applicable codes and ordinances, such as the Virginia Uniform Statewide Building Code (VA USBC) and the county subdivision ordinance, and may be undertaken only upon issuance of all necessary permits, including a conditional use permit if necessary. Uses and activities in floodplain districts that require a conditional use permit are identified in Sec. 15-463. Prior to issuance of any permits for development in floodplain districts, the floodplain administrator shall review all applications for compliance with all applicable State and Federal laws, as well as this ordinance, to ensure the use or activity is reasonably safe from flooding. Under no circumstances may any use, activity, or development adversely affect the capacity of the channels or floodway or any watercourse, drainage ditch, or any other drainage facility or system.
- B. Alteration or relocation of watercourse. Prior to any proposed elevation or relocation of any channels or of any watercourse, streams, etc., a permit must be obtained from the U.S. Army Corps of Engineers, the state water control board, and the state marine resources commission (a joint permit application is available from any of these organizations). Furthermore, notification of the proposal must be given by the applicant to all affected adjacent jurisdictions, the division of dam safety and floodplain management (department of conservation and recreation), and the Federal Emergency Management Agency (FEMA), with proof of notice being provided to the floodplain administrator. The flood-carrying capacity within an altered or relocated portion of any watercourse must be maintained.
- C. Site plans and permit applications. All applications for development in the floodplain district or within a dam break inundation zone must include the following information:

  - (1) Elevation of the lowest floor (including basement).
  - (2) For structures to be floodproofed (nonresidential only), the elevation to which the structure will be floodproofed.
  - (3) The elevation of the base flood.

- (4) Topographic information showing existing and proposed ground elevations.
- (5) Location of floodway, if it has been determined. Flood zones with undetermined floodway must submit to FEMA for approval of floodway designation.
- (6) Dam break inundation zone, if available.

D. General Permit Standards. The following provisions apply to all permits within a special flood hazard area (SFHA):

- (1) New construction and substantial improvements must be: (i) built in accordance with this ordinance and the VA USBC, (ii) constructed by methods and practices that minimize flood damage, (iii) constructed with materials and utility equipment resistant to flood damage, and (iv) anchored to prevent flotation, collapse, or lateral movement of the structure.
- (2) Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities, including duct work, shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

E. Elevation and Construction Standards. In all identified special flood hazard areas where base flood elevations have been provided in the FIS or generated by a certified professional, the following provisions apply:

- (1) Residential Construction. New construction or substantial improvement of any residential structure in AE or A zones with detailed base flood elevations must have the lowest floor, including basement, elevated to or above the base flood level plus 3 feet.

(2) Non-Residential Construction

- a. New construction or substantial improvement of any commercial, industrial, or non-residential buildings shall have the lowest floor, including basement, elevated to or above the base flood level plus 1 foot.
- b. Non-residential buildings located in AE or A zones may be floodproofed in lieu of being elevated provided that all areas of the building components below the elevation corresponding to the BFE plus two feet are watertight with walls substantially impermeable to the passage of water and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A Commonwealth of Virginia registered professional engineer or architect shall certify that the standards of this subsection are satisfied. Such certification, including the specific elevation (in relation to mean sea level) to which such structures are floodproofed, shall be maintained by the department of community development.

- (3) Space Below the Lowest Floor. In zones A and AE, fully enclosed areas of new construction or substantially improved structures that are below the regulatory flood protection elevation must:

- a. Not be designed or used for human habitation, but may be used solely

for parking of vehicles, building access, or limited storage of maintenance equipment used in connection with the premises. Access to the enclosed area must be the minimum necessary to allow for parking vehicles (garage door) or limited storage of maintenance equipment (standard exterior door), or entry to the living area (stairway or elevator):

- b. Be constructed entirely of flood resistant materials below the regulatory flood protection elevation; and
- c. Include measures to automatically equalize hydrostatic flood forces on walls by allowing for the entry and exit of floodwaters. To meet this requirement, the openings must either be certified by a Commonwealth of Virginia licensed professional engineer or architect or meet the following minimum design criteria:
  - 1. Provide a minimum of two openings on different sides of each enclosed area subject to flooding.
  - 2. The total net area of all openings must be at least one (1) square inch for each square foot of enclosed area subject to flooding.
  - 3. If a building has more than one enclosed area, each area must have openings to allow floodwaters to automatically enter and exit.
  - 4. The bottom of all required openings shall be no higher than one (1) foot above the adjacent grade.
  - 5. Openings may be equipped with screens, louvers, or other opening coverings or devices, provided they permit the automatic flow of floodwaters in both directions.
  - 6. Foundation enclosures made of flexible skirting are not considered enclosures for regulatory purposes, and, therefore, do not require openings. Masonry or wood underpinning, regardless of structural status, is considered an enclosure and requires openings as outlined above.

(4) Accessory Structures. Accessory structures in the SFHA shall comply with the elevation requirements and other requirements of Section 15-462.E(2) or, if not elevated or dry floodproofed, must:

- a. Not be used for human habitation;
- b. Be limited to no more than 600 square feet in total floor area;
- c. Be used only for parking vehicles or limited storage;
- d. Be constructed with flood damage-resistant materials below the base flood elevation;
- e. Be constructed and placed to offer the minimum resistance to the flow of floodwaters;
- f. Be anchored to prevent flotation;
- g. Have electrical service and mechanical equipment elevated to or above the base flood elevation;
- h. Be provided with flood openings that meet the following criteria:
  - 1. There shall be a minimum of two flood openings on different sides of each enclosed area; if a building has more than one enclosure below the lowest floor, each such enclosure shall have flood openings on

exterior walls.

2. The total net area of all flood openings must be at least 1 square inch for each square foot of enclosed area (non-engineered flood openings), or the flood openings shall be engineered flood openings that are designed and certified by a Commonwealth of Virginia licensed professional engineer to automatically allow entry and exit of floodwaters; the certification requirement may be satisfied by an individual certification or an Evaluation Report issued by the ICC Evaluation Service, Inc.
3. The bottom of each flood opening must be 1 foot or less above the higher of the interior floor or grade, or the exterior grade, immediately below the opening.
4. Any louvers, screens or other covers for the flood openings must allow the automatic flow of floodwaters into and out of the enclosed area.

(5) Standards for Recreational Vehicles. All recreational vehicles placed on sites must be on the site for fewer than 180 consecutive days, be fully licensed and ready for highway use (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).

F. *Preexisting and nonconforming structures.* A structure or use of a structure or premises that lawfully existed before the enactment of these provisions, but which is not in conformity with these provisions, may be continued subject to the following conditions:

(1) Existing structures in the floodway district cannot be changed, repaired or improved unless one of the following exceptions is established before the change is made:

- a. It has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practices that the proposed change, repair, or improvement would not result in any increase in the base flood elevation.
- b. The floodplain manager has determined that:
  1. The change is not a substantial repair or substantial improvement, and
  2. No new square footage is being built in the floodplain that is not complaint, and
  3. No new square footage is being built in the floodway, and
  4. The change complies with this ordinance and the VA USBC.
- c. The change is required to comply with a citation for a health or safety violation.

d. The structure is a historic structure and the change required would impair the historic nature of the structure.

(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% of its market value must conform to the Virginia Uniform Statewide Building Code (VA USBC).

(3) 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% or more of its market value can be undertaken only in full compliance with this article and the entire structure must conform to the Virginia Uniform Statewide Building Code (VA USBC).

G. Dam break inundation zones. No land can be developed or subdivided within the boundaries of a mapped dam break inundation zone unless it complies with the provisions of Virginia Code § 10.1-606.3. If the state department of conservation and recreation determines that the development or subdivision would change the spillway design flood standards of the impounding structure, and the proposed subdivision would allow development of three or more units (commercial, industrial, or residential in use), the county cannot permit the subdivision unless:

(1) The applicant agrees to alter the development so that it does not alter the spillway design flood standard required of the impounding structure; or

(2) The applicant contributes payment to construct the necessary upgrades to the affected impounding structure pursuant to Virginia Code § 15.2-2243.1.

H. Standards for Subdivision Proposals.

(1) All subdivision proposals shall be consistent with the need to minimize flood damage:

(2) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage:

(3) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards, and

(4) Base flood elevation data shall be obtained from other sources or developed using detailed methodologies, hydraulic and hydrologic analysis, comparable to those contained in a Flood Insurance Study (FIS) for subdivision proposals and other proposed development proposals (including manufactured home parks and subdivisions) that exceed fifty lots or five acres, whichever is the lesser.

### **Sec. 15-463. Allowable uses and structures in floodplain districts.**

The following uses and structures may be approved by the floodplain administrator or board of supervisors, as appropriate, provided the applicant has obtained and is in compliance with all required permits under this and other county ordinances, including Sec. 15-462 above, and the use or structure is not prohibited by any other ordinance.

Uses and structures identified in the chart below followed by the letter “A” can be approved administratively and do not require a conditional use permit. Uses and structures identified in the chart below followed by the letters “CUP” require the applicant to apply for and obtain a conditional use permit from the board of supervisors in accordance with Sec. 15-468 below, in addition to all other permits required by this and other county ordinances.

<b><u>Uses and Structures A or CUP</u></b>	
<u>Accessory use customarily and clearly incidental and subordinate to use permitted by right</u>	<u>CUP</u>
<u>Agricultural use, such as general farming, pasture, grazing, outdoor plant nurseries, horticulture, truck farming, forestry, sod farming, and wild crop harvesting</u>	<u>A</u>
<u>Accessory residential use, such as yard areas, garden, play area, and pervious loading areas</u>	<u>A</u>
<u>Carnival; circus; fair; any similar transient amusement enterprise</u>	<u>CUP</u>
<u>Commercial and industrial structures and use, including warehousing, which may require railroad frontage, provided they are located so as not to impede the flow of floodwaters pursuant to Sec. 15-467. Earthen or other fill material or nonresidential elevated structures may be utilized so long as the purpose and intent of Sec. 15-467 are upheld. Nonresidential structures located in a floodplain district must satisfy the performance standards of the Virginia Uniform Statewide Building Code and Sec. 15-467.</u>	<u>CUP</u>
<u>Commercial campground</u>	<u>CUP</u>
<u>Game farm; fish hatchery (excluding rearing structure); hunting and fishing reserves; boat landing</u>	<u>A</u>
<u>Gas transmission line</u>	<u>CUP</u>
<u>Hunting; fishing</u>	<u>A</u>
<u>Office quarters housed in a temporary structure such as a mobile home or trailer which may be readily towed or otherwise removed from the flood fringe prior to inundation by floodwaters</u>	<u>CUP</u>
<u>Outlet installation for sewage treatment plant; sealed public or private water supply well</u>	<u>A</u>
<u>Park; playground; day camp; picnic ground; golf course; golf driving range; miniature golf course; yacht club</u>	<u>CUP</u>
<u>Paved off-street parking, or loading and unloading area related to a use in an adjoining district</u>	<u>CUP</u>
<u>Public park; public recreational facility</u>	<u>A</u>

<u>Public and commercial swimming pool</u>	<u>CUP</u>
<u>Public utility distribution facility</u>	<u>A</u>
<u>Public utility transmission line (including liquid and natural gas), transmission tower, pipe, meter, railroad</u>	<u>CUP</u>
<u>Pulpwood receiving and storage yard, wood shipping scale, scalehouse, pumping station, and loading dock, provided these structures do not impede the flow of floodwaters or restrict the flow of debris</u>	<u>CUP</u>
<u>Retaining wall; channel improvement; flood retention dam and levee; culvert and bridge; all approved by state department of highways</u>	<u>A</u>
<u>Roadside stand for the sale of fish bait, or agricultural or horticultural products produced on the premises</u>	<u>CUP</u>
<u>Sand and gravel pit; quarry; soil removal; mining operation; all in accordance with Sec. 15-283.F</u>	<u>CUP</u>
<u>Structure customarily accessory and clearly incidental and subordinate to agricultural uses; park, playground, day camp, picnic ground, golf course/driving range, yacht club; sand and gravel pit and quarry, soil removal, mining operation; and commercial campground</u>	<u>CUP</u>
<u>Wildlife preserve; conservation area; woodland preserve; arboretum</u>	<u>A</u>

**Sec. 15-464. Prohibited uses and structures.**

- A. Any use or structure not of a character indicated in the allowable uses and structures chart in Sec. 15-463.
- B. Manufactured homes.
- C. Filling in with dirt, gravel, minerals or refuse, or regrading of land in a floodplain in any manner that would obstruct, interfere, or otherwise adversely affect flow patterns and currents during flooding.
- D. Private package sewage treatment plants, including conventional and alternative onsite septic systems, except for replacement systems as provided in Sec. 15-465.

**Sec. 15-465. Design criteria for utilities and facilities.**

- A. Sanitary sewer facility. All new or replacement sanitary sewer facilities (including all pumping stations and collector systems) must 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. *Onsite septic systems.* All replacement onsite waste disposal systems must be located and constructed to avoid impairment to them or contamination from them during flooding.
- C. *Water facilities.* All new or replacement water facilities must be designed to minimize or eliminate infiltration of floodwaters into the system and be located and constructed to minimize or eliminate flood damages.
- D. *Drainage facilities.* All storm drainage facilities must be designed to convey the flow of surface waters without damage to persons or property. The systems must ensure drainage away from buildings and onsite waste disposal sites.
- E. *Utilities.* All utilities, such as gas lines, or electrical and telephone systems, being placed in floodprone areas should be elevated, where possible, and constructed to minimize the chance of impairment during a flooding occurrence.
- F. *Streets and sidewalks.* Streets and sidewalks should be designed to minimize their potential for increasing and aggravating the levels of flood flow. Drainage openings are required to sufficiently discharge flood flows without unduly increasing flood heights.

#### **Sec. 15-466. Area regulations.**

The minimum lot area for each permitted use is eight acres; provided, however, this requirement does not apply to off-street parking, loading, or unloading, and front, side, and rear yard of uses permitted in an adjoining district. Maximum lot coverage by all structures cannot exceed 5% of total lot area.

#### **Sec. 15-467. Special requirements applicable to floodplain districts.**

- A. *Flood flow not to be obstructed.* Any provisions to the contrary notwithstanding, no use or structure is permitted in any floodplain if it will adversely affect normal flood flow, or will increase flooding of lands above or below the property, or will increase erosion within or adjoining the floodplain, or will cause diversion of floodwaters in a manner more likely to create damage than does flow in a normal course, or will increase peak flows or velocities in a manner likely to lead to added property damage or hazards to life, or will increase amounts of damaging materials (including those likely to be injurious to health) which might be carried downstream in floods.
- B. *Obstruction minimized; safety maximized.* Every structure permitted in floodplains must be located, elevated, and constructed to resist flotation and to offer minimum obstruction to flood flow. The ground floor level of every dwelling must be a minimum of three feet above the base flood elevation. No use is permitted if it will increase the amounts of potentially damaging materials, including those likely to be injurious to health, which might be carried downstream in floods.
- C. *Floodway district.* No encroachments, including fill, new construction, substantial improvements, or other development are permitted unless it has been demonstrated, through hydrologic and hydraulic analyses performed in

accordance with standard engineering practices, that the proposed encroachment would not result in any increase in the base flood elevation.

D. Flood fringe and approximated floodplain districts. When base flood elevation data or floodway data has not been provided, the floodplain administrator will obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal or state agency, or any other source, in order to administer the provisions under this section and those under Sec. 15-459.

### **Sec. 15-468. Additional factors to satisfy conditional use permits and variances.**

In approving applications for conditional use permits, the board of supervisors and, for variances, the board of zoning appeals, must satisfy all relevant factors and procedures specified in other sections of this ordinance and the following factors:

- A. The danger to life and property due to increased flood heights or velocities caused by encroachments. No conditional use permit or variance may be granted for any proposed use, development, or activity within the floodway district that will cause any increase in flood levels during the 1% annual chance flood.
- B. The danger that materials may be swept onto other lands or downstream to the injury of others.
- C. The proposed water supply and sanitation systems and the ability of these systems to prevent disease, contamination, and unsanitary conditions.
- D. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owners.
- E. The importance of the services provided by the proposed facility to the community.
- F. The facility's need for a waterfront location.
- G. The availability of alternative locations not subject to flooding for the proposal use.
- H. The compatibility of the proposed use with existing development and development anticipated in the foreseeable future.
- I. The relationship of the proposed use to the comprehensive plan.
- J. The safety of access to the property in time of flood of ordinary and emergency vehicles.
- K. The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters expected at the site.
- L. The historic nature of a structure. Variances for repair or rehabilitation of historic structures may be granted upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.

- M. No variance shall be granted for an accessory structure exceeding 600 square feet.
- N. Such other factors relevant to the purposes of this article.
- O. The board of supervisors and/or the board of zoning appeals may obtain the services of 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.
- P. Conditional use permits and variances can be issued only after it has been determined that the granting of them will not result in:
- (1) Unacceptable or prohibited increases in flood heights;
  - (2) Additional threats to public safety;
  - (3) Extraordinary public expense;
  - (4) Nuisances;
  - (5) Fraud or victimization of the public; or
  - (6) Conflict with local laws or ordinances.
- Q. Variances should only be issued if they will provide the minimum relief to exceptional hardship.
- R. An applicant who obtains approval to construct a structure below the base flood elevation must be notified in writing that it:
- (1) Increases risks to life and property; and
  - (2) Will result in increased premium rates for flood insurance.
- S. A record of the notification to the application, and a record of all conditional use permits or variances, including justification for their issuance, must be maintained and noted in the annual report submitted to FEMA.

### **Sec. 15-469. Appeals.**

Original determinations under this article, including questions on the boundaries of the special flood hazard area, will be made by the floodplain administrator. The boundaries can be validated by detailed on-site surveys approved by FEMA. In rendering decisions under this article, the board of zoning appeals shall consider, in addition to other evidence and standards, the findings and recommendations of the Monacan soil and water conservation district directors and staff, and the recommendations of the planning commission and other appropriate agencies. In any appeal procedure, both the property owner, at his expense, and the county or any other of its agencies or agents, will have the right to conduct on-site surveys and other studies, and present testimony and evidence of them to the floodplain administrator and to the board of zoning appeals.

The board of zoning appeals may require the applicant to submit to it engineering or other studies, prepared by competent engineers or other technical persons, when such information is needed to determine the effects of flooding on a proposed structure or use.

**Sec. 15-470. Records.**

Records of actions associated with administering this ordinance shall be kept on file and maintained by or under the direction of the floodplain administrator in perpetuity.

**Secs. 15-471-15-480. Reserved.**

2. **Except as amended herein, all County Code provisions remain in effect.**
  
3. **This ordinance is effective October 10, 2024.**