

### **GUILFORD COUNTY**

### PLANNING AND DEVELOPMENT PLANNING BOARD

**TEXT AMENDMENT CASE #21-10-GCPL-09184** Unified Development Ordinance (UDO) Article 9.3 Flood Damage Prevention Amendment to the No-fill in Floodplain Provision to Allow Fill for Restoration of Natural Floodplain Functions including Related Clarifications and Formatting Revisions

### **Description**

The intent of the proposed text amendment is to provide an exclusion to the no-fill provision in Article 9.3 to allow minor filling in the Special Flood Hazard Area (SFHA a.k.a. 100-year Floodplain) where needed to protect or restore natural floodplain functions, such as for part of a stream restoration project.

The amendment language was derived in collaboration with the County's assigned FEMA Community Rating System (CRS) Specialist, the CRS technical advisor subcontracted by FEMA and the NC Department of Public Safety's National Flood Insurance Planner.

Clarifications related to the no-fill provision and formatting revisions to ordinance section numbering also are included in the proposed text amendment.

### **Consistency Statement**

**Consistency with Adopted Plans:** The proposed text amendment is consistent with the following goal of the *Guilford County Comprehensive Plan*:

<u>Natural, Historic, and Cultural Resources Element - Goal #1:</u> "To seek a balance between the built environment and the protection and preservation of the County's natural, historic, and cultural resources through prudent management, public education, participation and outreach, appropriate regulations and enforcement, and active partnerships with stakeholders."

#### Staff Recommendation

**Staff Recommendation:** Staff recommends approval.

The recommended action is reasonable and in the public interest given that it will allow for more appropriately designed environmental restoration projects in or near floodplains, such as stream restoration projects, while adding no new restrictions to development in or near floodplains.



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# PROPOSED TEXT AMENDMENT TO THE GUILFORD COUNTY UNIFIED DEVELOPMENT ORDINANCE ARTICLE 9.3 FLOOD DAMAGE PREVENTION TO AMEND THE NO-FILL IN FLOODPLAIN PROVISION TO ALLOW FILL FOR RESTORATION OF NATURAL FLOODPLAIN FUNCTIONS INCLUDING RELATED CLARIFICATIONS AND FORMATTING REVISIONS Case #21-10-GCPL-09184

- Amend Section 9.3.P.1.p. PROVISIONS FOR FLOOD HAZARD REDUCTION General Standards to add Section (2) "Exclusions" to the no-fill provision to allow minor filling in the Special Flood Hazard Area (SFHA a.k.a. 100-year floodplain) to restore natural floodplain functions.
  - **p.** Fill is prohibited in the SFHA, including construction of buildings on fill.
    - (1) This includes not approving Conditional Letters or Letters of Map Revision Based on Fill (CLOMR-F or LOMR-F).
    - (2) Exclusions:
      - (a) Minor filling where needed to protect or restore natural floodplain functions, such as part of a stream channel restoration project. To meet this exclusion, the project must utilize only the minimum amount of fill necessary to ensure that the targeted area is restored to full ecological functionality. The applicant/requester must obtain all required state and local permits, provide documentation demonstrating compliance with the Endangered Species Act, and when required, obtain a CLOMR and LOMR with FEMA's concurrence on the impacts of the project to flood risk and endangered species.
- Amend Sections 9.3.P.2.e. & f. PROVISIONS FOR FLOOD HAZARD REDUCTION Specific Standards
  to correct section numbering for Elevated Buildings, and to add cross-reference to the no-fill
  provision. Section 9.3.P.2.f. will be Reserved for future use and to avoid changes to section
  numbering for Sections 9.3.P.2.g. through m.
  - e. Elevated Buildings.
    - (1) Fully enclosed area, of new construction and substantially improved structures, which is below the lowest floor:
      - (a) Shall not be designed or used for human habitation, but shall only be used for parking of vehicles, building access, or limited storage of maintenance equipment used in connection with the premises. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment (standard exterior door), or entry to the living area



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(stairway or elevator). The interior portion of such enclosed area shall not be finished or partitioned into separate rooms, except to enclose storage areas;

- (b) Shall not be temperature-controlled or conditioned;
- (c) Shall be constructed entirely of flood resistant materials to the Regulatory Flood Protection Elevation: and
- (d) Shall include, in Zones A, AE, AH, AO, A99 flood openings 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 professional engineer or architect or meet or exceed the following minimum design criteria;
  - (e) (i) A minimum of two (2) flood openings on different sides of each enclosed area subject to flooding.
  - (f) (ii) The total net area of all flood openings must be at least one (1) square inch for each square foot of enclosed area subject to flooding.
  - (g)—(iii) If a building has more than one (1) enclosed area, each enclosed area must have flood openings to allow floodwaters to automatically enter and exit.
  - (h)—(iv) The bottom of all required flood openings shall be no higher than one (1) foot above the adjacent grade.
  - (i) (v) Flood openings may be equipped with screens, louvers, or other coverings or devices, provided they permit the automatic flow of floodwaters in both directions; and
  - (i) (vi) Enclosures made of flexible skirting are not considered enclosures for regulatory purposes, and, therefore, do not require flood openings. Masonry or wood underpinning, regardless of structural status, is considered an enclosure and requires flood openings as outlined above.
- f. (e) Fill/Grading
  - (1) (i) Fill is prohibited in the SFHA. See Section 9.3.P.1.p.
- (2) (f) Property owners shall be required to execute and record a non-conversion agreement prior to issuance of a building permit declaring that the area below the lowest floor shall not be improved, finished or otherwise converted to habitable space; Guilford County will have the right to inspect the enclosed area. Guilford County will conduct annual inspections. This agreement shall be recorded with the County Name Guilford County Register of Deeds and shall transfer with the property in perpetuity.
- (3) (g) Release of restrictive covenant. If a property which is bound by a non-conversion agreement is modified to remove enclosed areas below BFE, then the owner may



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request release of restrictive covenant after staff inspection and submittal of confirming documentation.

### f. [SECTION RESERVED]

g. Additions/Improvements

- Amend Section 9.3.P.2.m. PROVISIONS FOR FLOOD HAZARD REDUCTION Specific Standards for Other Development to delete reference to fill:
  - m. Other Development
    - (1) Fences in regulated floodways and non-encroachment areas that have the potential to block the passage of floodwaters, such as stockade fences and wire mesh fences, shall meet the limitations of Section 9.3.Q.10 and Table 9.1.6 of this Article.
    - (2) Retaining walls, sidewalks and driveways in regulated floodways and NEAs. Retaining walls and sidewalks and driveways that involve the placement of fill in regulated floodways shall meet the limitations of Section 9.3.S of this Article.
- Amend Section 9.3.Q.1.a. STANDARDS FOR FLOODPLAINS WITHOUT ESTABLISHED BASE FLOOD ELEVATIONS to delete reference to fill:
  - 1. Within the Special Flood Hazard Areas designated as Approximate Zone A and established in Section 9.3, where no Base Flood Elevation (BFE) data has been provided by FEMA, the following provisions, in addition Section 9.3.S.(1) and (2), shall apply:
    - a. No encroachments, including fill, new construction, substantial improvements or new development shall be permitted within a distance of twenty (20) feet each side from top of bank or five (5) times the width of the stream, whichever is greater, unless certification with supporting technical data by a registered professional engineer is provided demonstrating that such encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
- Amend Section 9.3.R.1.b. STANDARDS FOR RIVERINE FLOODPLAINS WITH BFE BUT WITHOUT ESTABLISHED FLOODWAYS OR NON-ENCROACHMENT AREAS to delete reference to fill:
  - 1. Along rivers and streams where BFE data is provided but neither floodway nor nonencroachment areas are identified for a Special Flood Hazard Area on the FIRM or in the FIS report, the following requirements shall apply to all development within such areas:
    - a. Standards outlined in Section 9.3.P.1; and



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- b. Until a regulatory floodway or non-encroachment area is designated, no encroachments, including fill, new construction, substantial improvements, or other development, shall be permitted unless certification with supporting technical data by a registered professional engineer is provided demonstrating that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one (1) foot at any point within the community.
- Amend Section 9.3.S.1.a. FLOODWAYS OR NON-ENCROACHMENT AREAS to delete reference to fill:
  - 1. Areas designated as floodways or non-encroachment areas are located within the Special Flood Hazard Areas established in Section 9.3.D.2. The floodways and non-encroachment areas are extremely hazardous areas due to the velocity of floodwaters that have erosion potential and carry debris and potential projectiles. The following provisions, in addition to standards outlined in Section 9.3.P.1 and shall apply to all development within such areas:
    - **a.** No encroachments, including fill, new construction, substantial improvements and other developments shall be permitted unless it has been demonstrated that:
      - (1) The proposed encroachment would not result in any increase in the flood levels during the occurrence of the base flood, based on hydrologic and hydraulic analyses performed in accordance with standard engineering practice and presented to the Floodplain Administrator prior to issuance of Floodplain Development Permit, or
      - (2) A Conditional Letter of Map Revision (CLOMR) has been approved by FEMA. A Letter of Map Revision (LOMR) must also be obtained upon completion of the proposed encroachment.