

ATTACHMENT E

Flood Hazard Areas

*9J-5 requirement: Primary - 9J-5.013(1)(a)2, (b); (2)(a), (b)2, (c)6
Secondary - 9J-5.013(2)(c)9*

Objective 4

Reduce loss of flood storage capacity and reduce risk to life and property by continuing to apply regulations which minimize the impact of development within flood hazard areas.

Note: Unless otherwise indicated herein, stricken policy language is reordered and contained within.

Policy 4.1

Brevard County shall continue to protect the riverine floodplain in order to protect infrastructure and human life, conserve flood storage capacities, and to improve, where feasible, the quality of water within the watershed. At a minimum, the following criteria shall be the basis for the protection of the riverine floodplain:

Criteria:

- ~~A. The ten-year riverine floodplain should be maintained in its natural state unless a project has a special reason or need to be located there. These special reasons and needs are further defined in the land development regulations. These needs may include but are not limited to agriculture and passive recreation.~~
- ~~B. Development within the riverine one hundred year floodplain shall not adversely impact the drainage of adjoining properties or degrade the quality of the receiving surface water body.~~
- ~~C. The following uses are not compatible with the resource requirements of the one hundred year riverine floodplain and shall not be permitted. These include, but are not limited to:
 - ~~1. Placing, depositing or dumping of solid waste except for treated municipal solid sludge.~~
 - ~~2. Processing and storing of threshold amounts of hazardous materials.~~
 - ~~3. Disposal of hazardous materials.~~~~

ATTACHMENT E

- ~~D. There shall be no net loss of flood storage capacity of the twenty-five year riverine floodplain.~~
- ~~E. There shall be no net change in the rate and volume of floodwater discharged from the pre-development twenty-five year riverine floodplain.~~
- A. Within the 100-year riverine floodplain (that is the area that is below the 100-year flood elevation but above the 25-year flood elevation):
1. Development shall not adversely impact the drainage of adjoining properties or degrade the quality of the receiving surface water body. There shall be no net loss of flood storage capacity of the 100-year riverine floodplain.
 2. The following uses are not compatible with the resource requirements of the 100-year riverine floodplain and shall not be permitted. These include, but are not limited to:
 - a. Placing, depositing or dumping of solid waste except for treated municipal solid sludge.
 - b. Processing and storing of threshold amounts of hazardous materials.
 - c. Disposal of hazardous materials.
- B. Within the 25-year riverine floodplain (that is the area that is at or below the 25-year flood elevation but above the 10-year flood elevation):
1. There shall be no net loss of flood storage capacity of the 25-year riverine floodplain. Development shall not impact adjacent property or degrade the quality of the receiving surface water body.
 2. There shall be no net change in the rate and volume of floodwater discharged from the pre-development 25-year riverine floodplain.
 3. Fill in the 25-year floodplain for industrial land uses shall be prohibited unless such activity is in the best public interest.
- C. Within the 10-year riverine floodplain (that is the area that is at or below the 10-year flood elevation but above the annual flood elevation):

ATTACHMENT E

1. The 10-year riverine floodplain should be maintained in its natural state unless a project has a special reason or need to be located there. These special reasons and needs are further defined in the land development regulations. These needs may include but are not limited to agriculture and passive recreation.
 2. Fill in the 10-year riverine floodplain for institutional, commercial, and industrial land uses shall be prohibited unless such activity is in the best public interest.
 3. There shall be no net loss of flood storage capacity of the 10-year riverine floodplain.
 4. There shall be no net change in the rate and volume of floodwater discharged from the pre-development 10-year riverine floodplain.
- D. The best available data shall be utilized to determine appropriate floodplain elevations.
- FE. Brevard County will coordinate with the SJRWMD or other appropriate agencies in determining the appropriate first floor building elevation within the twenty-five to one-hundred year floodplain and shall ensure that habitable structures are constructed above base flood elevation.

Justification: Proposed Policy 4.1 now consolidates criteria for the 10-year, 25-year, and 100-year riverine floodplains. In an effort to provide greater flexibility and engineering driven floodplain management solutions; while maintaining consistency with FAC Chapter 9J-5.013, established densities for residential development and allowable maximum filled footprint areas for commercial development in riverine floodplains are stricken in Policy 4.2. However, Policy 4.1 now requires a clear “no net loss” of flood storage capacity for all fill placed within riverine floodplains. This requirement is in the public’s interest of safety and reduces the future need for publically-funded flood mitigation retrofit projects.

It should be noted that the National Flood Insurance Program floodway standard in 44CFR 60.3(d) restricts new development from obstructing the flow of water and increasing flood heights. However, this provision does not address the need to maintain flood storage. Especially in flat areas, the floodplain provides a valuable function by storing floodwaters. When fill or buildings are placed in the flood fringe, the flood storage areas are lost, and flood heights will rise because there is less room for the floodwaters. This is particularly important in smaller watersheds which respond more quickly to changes in the topography. One approach used to address this issue is to require compensatory storage to offset any loss of flood storage capacity. Some

ATTACHMENT E

communities, including Brevard County currently, adopt more restrictive standards that regulate the amount of fill or buildings that can displace floodwater in the flood fringe. Community Rating System (CRS) credits are available for communities that adopt compensatory storage requirements. It is not known whether the removal of the density and fill footprint criteria will have a deleterious effect on Brevard County's CRS.

Policy 4.2

~~Brevard County shall continue to implement land use density restrictions within riverine floodplains in order to protect infrastructure and human life, conserve flood storage capacities, and to improve, where feasible, the quality of water within the watershed. At a minimum, the following shall apply:~~

- ~~A. Within the one hundred year riverine floodplain (that is the area that is below the 100 year flood elevation but above the 25 year flood elevation):~~
 - ~~1. Residential density shall be limited to no more than two dwelling units per acre; and~~
 - ~~2. Commercial and industrial land uses shall be limited to a filled footprint of no more than 15,000 square feet per acre.~~
- ~~B. Within the twenty five year riverine floodplain (that is the area that is at or below the 25 year flood elevation but above the 10 year flood elevation):~~
 - ~~1. Residential density shall be limited to not more than one dwelling unit per two and one half acres; and~~
 - ~~2. Commercial land uses shall be limited to a filled footprint of no more than 3,000 square feet per acre and commercial uses shall be no greater than one acre; and~~
 - ~~3. Industrial land uses shall be prohibited.~~
- ~~C. Within the ten year riverine floodplain (that is the area that is at or below the 10 year flood elevation but above the annual flood elevation):~~
 - ~~1. Residential density shall be limited to not more than one dwelling unit per ten acres; and~~

ATTACHMENT E

~~2. Commercial and industrial land uses shall be prohibited unless they are in the best public interest or the location of the use is integral to its operation.~~

~~D. Development within the riverine floodplain should not result in a loss of floodplain storage capacity below the 25-year floodplain elevation of riverine systems, or impact adjacent property.~~

~~E. The best available data shall be utilized to determine appropriate floodplain elevations.~~

Within the annual riverine floodplain (that is the area that is at or below the annual flood elevation) residential, commercial, and industrial land uses shall be prohibited unless the project has a special reason or need to locate within the annual floodplain and it is in the best public interest. The annual riverine floodplains within Brevard County should be left in their natural state, and re-established where feasible.

Justification: Proposed Policy 4.2 is former Policy 4.3. However, the phrase “overriding public interest” has been replaced with “best public interest.” “Best public interest” is defined in the Comprehensive Plan Glossary, while “overriding public interest” is not.

Policy 4.3

~~Within the annual riverine floodplain (that is the area that is at or below the annual flood elevation) residential, commercial, and industrial land uses shall be prohibited unless the project has a special reason or need to locate within the annual floodplain and there is overriding public interest. The annual riverine floodplains within Brevard County should be left in their natural state, and re-established where feasible.~~

Public facilities should not be located within the 100-year riverine or estuarine floodplain unless the following apply:

Criteria:

A. The facilities are water-dependent, such as mosquito control facilities; or,

B. The facilities are water-related, such as boat ramps, docks or surface water management facilities; or,

C. The facilities are not adversely affected by periodic flooding or standing water, such as highway bridges and some recreational facilities; or,

ATTACHMENT E

- D. The building structures are flood-proofed and located above the 100-year flood elevation, or removed from the floodplain by appropriately constructed dikes or levees; or,
- E. The facilities are found to be in the public interest and there is no feasible alternative.

Justification: Changes reflect reordering of policy 4.10.

Policy 4.4

New dikes, levees or other such structures should not be permitted below the 100-year riverine flood elevation except for temporary earthen structures that have a maximum height of less than the 10-year flood elevation and which will not restrict the flow of the 100-year storm floodwaters. The only potential exceptions to this provision are such structures which are shown to have over-riding public benefit. Replacement or repair of dikes, levees and other such structures are permitted as long as such replacement or repair does not change the status of the floodplain and will maintain the existing ability to utilize the property. Non-structural methods of floodplain management are given priority over structural methods.

Policy 4.5

Brevard County shall develop regulations to protect the estuarine floodplains by implementing the following minimum criteria:

Criteria:

- A. Development within the ~~one hundred~~100-year estuarine floodplain shall not adversely impact the drainage of adjacent properties or the quality of the receiving surface water body.
- B. The following specific uses are not compatible with the resource requirements of the ~~one hundred~~100-year estuarine floodplain and shall not be permitted. These include, but are not limited to:
 - 1. Placing, depositing, or dumping of solid wastes.
 - 2. Processing and storing of threshold amounts of hazardous materials.
 - 3. Disposal of hazardous materials.
- C. The annual estuarine floodplains within Brevard County should be left in their natural state, and re-established where feasible.

ATTACHMENT E

Policy 4.6

Brevard County shall develop regulations to ensure that alterations of isolated ~~one hundred~~ 100-year floodplains do not adversely impact the drainage of adjacent properties or public drainage facilities.

Policy 4.7

Brevard County shall continue to protect the coastal floodplain through the implementation of the following minimum criteria:

Criteria:

- A. Prohibit development within the annual coastal floodplain.
- B. Limit development water-ward of the Brevard County Coastal Construction Setback Line to those structures necessary to protect the natural dune system and to provide beach access.
- C. Brevard County shall continue to maintain construction standards for all development within the ~~one hundred~~ 100-year storm surge zone as established by the Florida Department of Environmental Protection, the U.S. Southern Building Code, or other applicable regulations.

Justification: Proposed Policy modifications are only grammatical in nature.

Policy 4.8

Brevard County shall identify structural controls within the floodplain which degrade natural systems and make recommendations for alternatives to re-establish the natural floodplain, where feasible.

Policy 4.9

Brevard County shall continue to participate in the National Flood Insurance Program administered by the Federal Emergency Management Administration (FEMA). Amendments to the County's flood ordinance shall be adopted as necessitated by changes in FEMA regulations.

~~Policy 4.10~~

~~Public facilities should not be located within the 100 year riverine or estuarine floodplain unless the following apply:~~

~~Criteria:~~

- ~~A. The facilities are water dependent, such as mosquito control facilities; or,~~

ATTACHMENT E

- ~~B. The facilities are water related, such as boat ramps, docks or surface water management facilities; or,~~
- ~~C. The facilities are not adversely affected by periodic flooding or standing water, such as highway bridges and some recreational facilities; or,~~
- ~~D. The building structures are flood proofed and located above the 100 year flood elevation, or removed from the floodplain by appropriately constructed dikes or levees; or,~~
- ~~E. The facilities are found to be in the public interest and there is no feasible alternative.~~