

Protection Measures for Historic Structures

The primary damage to historic buildings in a flood disaster is from immersion of building materials in floodwaters and the force of floodwaters that can cause structural collapse. Storm and sewer backup during flooding, as well as fire due to ruptured utility lines, mold and mildew and warping due to prolonged presence of moisture is also a damage factor.

Although historic structures are exempt from the NFIP floodplain management requirements for new and substantially improved construction, flood mitigation measures should be a consideration to minimize flood damages when rehabilitating a historic structure or repairing a damaged historic structure.

There are a variety of relatively simple measures that can be implemented to minimize the effects of flooding. Many of the techniques described below may have minimal impact on the design features of a historic structure - several may require a design professional and licensed contractor to implement.

- Relocate contents to a safer location. Heirlooms and other cultural resources should be located above the BFE.
- Create positive drainage around the building. In places where ground slope is either flat or toward the building, increase the grade immediately adjacent to the facade to achieve positive drainage away from the building.
- Protect mechanical and utility equipment by elevating above the BFE.
- Remove modern finished materials from areas that are floodprone.
- Use flood resistant materials below the BFE.
- Install mini-floodwalls to protect openings such as a window well.
- Temporary measures such as sandbag.

Property owners may wish to undertake more extensive mitigation measures if there is a likelihood of significant or more frequent flood damage to the historic structure. These mitigation measures could include elevating, floodproofing, or relocating the structure to a site that is outside of the Special Flood Hazard Area.

Further Information

You can download the City's Floodplain Management Ordinance by scanning the code or visit <http://cityofapalachicola.com/BuildingDept.cfm>

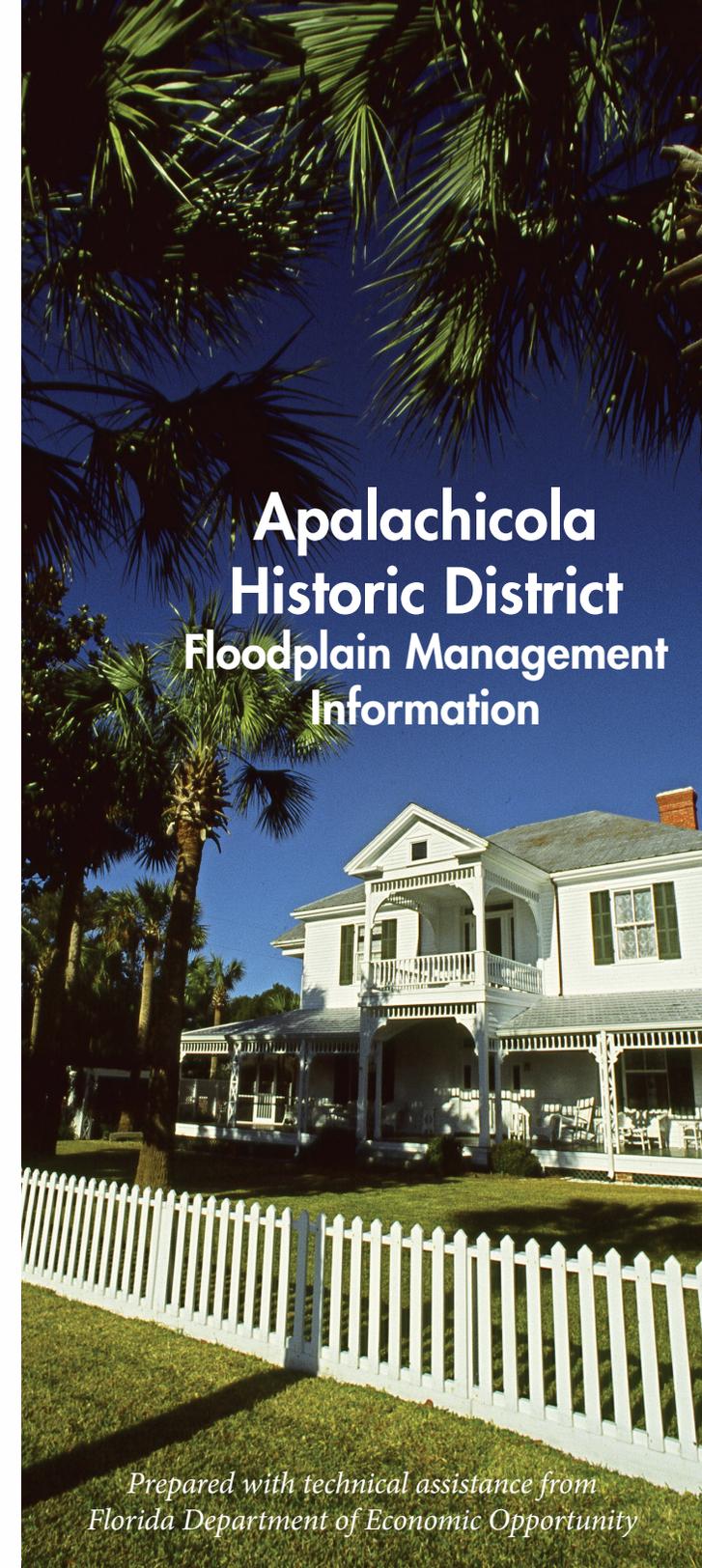


Additional FEMA Flood Information

- *Homeowner's Guide to Retrofitting, Six Ways to Protect Your House from Flooding*, FEMA 312, June 1998.
- *Floodproofing Non-Residential Structures*, FEMA 102, May 1986.
- *Flood-Resistant Materials Requirements for Buildings Located in Special Flood Hazard Areas in Accordance with the National Flood Insurance Program*, FEMA Technical Bulletin 2-93, FIA-TB-2. 4/93.
- *Openings in Foundation Walls for Buildings Located in Special Flood Hazard Areas in accordance with the National Flood Insurance Program*, FEMA Technical Bulletin 1-93, FIA-TB-1 4/93.
- *Non-Residential Floodproofing-Requirements and Certification for Buildings Located in Special Flood Hazard Areas in accordance with the National Flood Insurance Program*, FEMA Technical Bulletin 3-93, FIA-TB-3. 4/93.
- *Protecting Building Utilities From Flood Damage, Principles and Practices for the Design and Construction of Flood Resistant Building Utility Systems*, FEMA 348, November 1999.
- *Recommended Residential Construction for the Gulf Coast, Building on Strong and Safe Foundations*, FEMA 550, July 2006.
- *Repairing Your Flood Home, Federal Emergency Management Agency and the American Red Cross*, ARC 4477 or FEMA 234, 1992.
- *Wet Floodproofing Requirements for Structures Located in Special Flood Hazard Areas in accordance with the National Flood Insurance Program*, Technical Bulletin 7-93, FIA-TB-7 12/93.

The documents identified above are available as downloads from <http://www.fema.gov/library/index.jsp>.

Apalachicola Historic District Floodplain Management Information



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In accordance with National Flood Insurance Program (NFIP) regulations, Apalachicola's Floodplain Management Ordinance provides variance relief for the repair, improvement or rehabilitation of a historic building in the City's rated flood zones.

Variance Authorization

107.4 Historic Buildings. A variance is authorized to be issued for the repair, improvement, or rehabilitation of a historic building that is determined eligible for the exception to the flood resistant construction requirements of the Florida Building Code, Existing Building, Chapter 11 Historic Buildings, upon a determination that the proposed repair, improvement, or rehabilitation will not preclude the building's continued designation as a historic building and the variance is the minimum necessary to preserve the historic character and design of the building. If the proposed work precludes the building's continued designation as a historic building, a variance shall not be granted and the building and any repair, improvement, and rehabilitation shall be subject to the requirements of the Florida Building Code.

Am I In The "Zone?"

The City of Apalachicola website CityofApalachicola.com features an accurate GIS map of the Federal Insurance Rate Map Boundaries online at <http://cityofapalachicola.com/gis-map.cfm>. You can also scan the code below to access the map on your mobile phone or tablet.



Is My Building Considered Historic?

The definition section of the NFIP defines "historic structure" as any structure that is:

1. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
2. Certified or preliminarily determined by the Secretary of the 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;
3. Individually listed on a state inventory of historic places in communities with historic preservation programs that have been approved by the Secretary of the Interior; or
4. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either;
 - a. By an approved state program as determined by the Secretary of the Interior or
 - b. Directly by the Secretary of the Interior in States without approved programs.

Florida Master Site File Map of Apalachicola's Historic Resources in Special Flood Hazard Zones

The CityofApalachicola.com website features an interactive map of the historic resources within the City's Area of Special Flood Hazard (A&V zones) You can view the map online at <http://cityofapalachicola.com/gis-map.cfm> or you can scan the code below to access the map on your mobile phone or tablet.



Regulatory Options

There are three basic forms of floodproofing measures to minimize the risk of flooding. Those measures include elevation, wetproofing and dryproofing. (<https://www.fema.gov/media-library/assets/documents/13411>.)

The following are general regulations relating to historic structures below BFE.

- May be rehabilitated without meeting NFIP regulations after granting a variance.
- New residential construction may not be floodproofed but must be elevated to meet elevation requirements.
- Non-residential construction may not be wet floodproofed.
- Historic structures Substantial Improvement/ Substantial Damage may be dry floodproofed.

Definitions:

Wet-floodproofing allows for the flooding of a structure's interior to equalize pressure on exterior walls, surfaces, and supports of the structure during a flood. (Technical Bulletin 7-93 Wet Floodproofing Requirements)

Dry floodproofing means making a building watertight, substantially impermeable to floodwaters. (Technical Bulletin 3-93 Non-Residential Floodproofing)

Elevation: One of the common methods of protecting flood-prone buildings is to elevate the lowest floor of a structure above the BFE - elevation of the one-percent-annual chance flood.

New Construction and Non-contributing Structures

Historic Districts contain a mix of buildings. In addition to structures that contribute to the historic significance of the district, there are structures that have no historical significance and which do not contribute to the historic significance of a historic district. All non-contributing structures and vacant lots are subject to all of the floodplain requirements that apply to new construction and substantial improvements. (44 CFR.60.3)

Flood Insurance for Historic Structures

In addition to relief from NFIP floodplain management requirements, owners of historic structures may be eligible to obtain and maintain flood insurance at subsidized rates. Flood insurance at subsidized rates is available when a variance is granted under the variance provision because historic structures are considered Pre-FIRM under the NFIP. (44 CFR 59.11)