

BLUF:

FEMA routinely receives request for technical assistance to capture the following to assist local floodplain administrator(s):

- 1) Clarify regulatory definition of *Historic Structure* under the NFIP
- 2) Identify if Local Historic Districts meet the NFIP definition of *Historic Structure*
- 3) What relief a *Historic Structure* designation provides and how this may be applied, specifically to Substantial Improvement.

1. Clarifying and Applying FEMA NFIP Definition of Historic Structure

FEMA acknowledges that the spirit and direction of the Nation are founded upon and reflected in our historic heritage. To this end, FEMA recognizes the importance of protecting our Nation's heritage and that one of our Nation's most significant resources are our historic buildings, landmarks, and sites. In applying the National Flood Insurance Program (NFIP), FEMA recognizes that historic properties may be substantially altered and this could result in loss of irreplaceable heritage. FEMA NFIP regulations provide significant relief to *Historic Structures* as an incentive for property owners to preserve these assets as a living part of our communities and to maintain the historic character and historic integrity of the *Historic Structures* that they own.

As established in NFIP implementing regulation¹, FEMA defines *Historic Structure* as:

Historic Structure means any structure that is:

- (a) 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 NRHP;
- (b) 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;
- (c) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or

¹ 44 CFR §59.1, Definitions of NFIP Terms, <https://www.fema.gov/media-library/assets/documents/12437>, accessed October 12, 2018

(d) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either;

(1) By an approved state program as determined by the Secretary of the Interior or

(2) Directly by the Secretary of the Interior in States without approved programs.

FEMA has developed FEMA P-467-2, FEMA Floodplain Management Bulletin on Historic Structures² for FEMA and local floodplain administrators to address how the NFIP treats *Historic Structures*. The bulletin represents FEMA's interpretation of statutory and regulatory requirements and does not, of itself, impose legally enforceable obligations. The bulletin sets forth an agency practice that FEMA employees follow to be consistent, fair, and equitable in the implementation of the NFIP.

Local Floodplain Administrators often walk through this regulatory definition of Historic Structures:

- 1) Listed individually in the National Register of Historic Places (a listing maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the NRHP;
 - a) This includes structures that are determined to be eligible for listing by the Secretary of the Interior as a historic structure. A determination of "eligibility" is a decision by the Department of the Interior that a district, site, building, structure, or object meets the NRHP criteria for evaluation although the property is not formally listed in the NRHP.
 - i) This is a very binary application; listed or not listed in the NRHP³. If listed in NRHP, it meets the FEMA NFIP definition of *Historic Structure*. This database can be queried by State, City, County; every one of these would individually meet the NFIP definition of *Historic Structure*.
 - ii) Previous survey work by a Federal agency and a finding that the property is (or may be) eligible for listing in the NRHP for the purposes of Section 106 of the National Historic Preservation Act⁴ or implementing regulations at 36 CFR Part 800⁵ is not sufficient to

² FEMA Publication P-467-2, Floodplain Management Bulletin **Historic Structures**, May 2008, <https://www.fema.gov/media-library/assets/documents/13411?id=3282>, accessed October 12, 2018

³ National Register of Historic Places NPGallery Digital Asset Database, <https://npgallery.nps.gov/nrhp>, accessed October 12, 2018

⁴ National Historic Preservation Act of 1966, as amended, P.L. 102-575, <https://www.nps.gov/history/local-law/nhpa1966.htm>, accessed October 12, 2018

⁵ 36 CFR Part 800 – Protection of Historic Properties, <https://www.achp.gov/sites/default/files/regulations/2017-02/regs-rev04.pdf>, accessed October 12, 2018

meet the NFIP definition of historic property if the next logical steps of preparing and submitting an NRHP Application to the Secretary of the Interior have not been fulfilled. This process holds Federal agencies to a standard that requires them to identify historic properties impacted by individual Federal undertakings and seek ways to avoid, minimize, or mitigate any adverse effects. FEMA incorporated Section 106 NHPA into the passage of NFIP regulations, and the definition of *Historic Structures* reflects the outcome of this consultation.

- iii) There are a very limited number of structures that are determined as meeting the requirements for individual listing in the NRHP but not listed; perhaps lag time between evaluation as eligible and actual listing in the NRHP or special situations such as by *Owner Objection*.
- 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;
- a) This is a very binary application; listed or not listed in the NRHP as a registered historic district.
 - b) Within each of these NRHP Registration Forms, individual buildings and structures are identified as:
 - i) Individually eligible for listing in the NRHP (and meeting the FEMA NFIP *Historic Structure* definition)
 - ii) Contributing to the historical significance of a NRHP listed historic district (and meeting the FEMA NFIP *Historic Structure* definition)
 - iii) Non-contributing structures (and not meeting the FEMA NFIP *Historic Structure* definition)
- 3) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
- a) The Missouri Department of Natural Resources, State Historic Preservation Office, is a state with a historic program that has been approved by the Secretary of the Interior. However they do not maintain a separate state register of historic places. Within the state of Missouri, there are no properties that will meet this section of the FEMA definition or *Historic Structures*.

- 4) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either; (1) By an approved state program as determined by the Secretary of the Interior or (2) Directly by the Secretary of the Interior in States without approved programs.
 - a) The Missouri Department of Natural Resources, State Historic Preservation Office, is a state with a historic program that has been approved by the Secretary of the Interior.
 - b) Missouri has a Certified Local District Program that recognizes locally designated historic districts in Kansas City and St. Louis have been certified to the U.S. Department of the Interior as substantially meeting NRHP criteria⁶, and meeting the FEMA *Historic Structure* definition.
 - c) Missouri also has a Certified Local Government (CLG) program that recognizes that implementing a historic preservation program at the local level is the best protection that can be devised for the cultural resources of a community⁷ and has established formal guidelines for communities to adopt for inclusion as a CLG⁸. These programs need evaluation to determine if they meet the FEMA *Historic Structure* definition.
 - i) The local programs determine what is important to the community, independent of NRHP eligibility
 - ii) The local programs also determine the extent and stringency of the protection to be given to protect local cultural resources through district ordinances and design review guidelines
 - iii) The requirements for participation in the Missouri CLG program include enacting a historic preservation ordinance, appointing a historic preservation commission, conducting ongoing survey and inventory of historic properties, and conducting public outreach and education

⁶ Missouri Department of Natural Resources, *Missouri's Certified Local Districts*, <https://dnr.mo.gov/shpo/cld.htm>, accessed October 12, 2018

⁷ Missouri Department of Natural Resources, *Missouri Certified Local Government Program*, <https://dnr.mo.gov/shpo/certifie.htm>, accessed October 12, 2018

⁸ Missouri Department of Natural Resources, *Guidelines for Participation in Missouri's Certified Local Government Program*, <https://dnr.mo.gov/shpo/clgguide.htm>, accessed October 12, 2018

2. NFIP and Unique Application to *Historic Structures*

To participate in the NFIP, communities must adopt and enforce regulations and codes that apply to new development in *Special Flood Hazard Areas* (SFHAs)⁹. When buildings undergo repair or improvement, it is an opportunity for local floodplain management programs to reduce flood damage to existing structures. The NFIP's life safety and building performance requirements for residential structures requires all residential structures to be elevated above the *Base Flood Elevation* (BFE)¹⁰, and includes specific performance requirements such as; resist hydrostatic and hydrodynamic forces and buoyance, as detailed in the various technical bulletins and guidance developed by FEMA. A locally adopted zoning district, whether intended to preserve historical qualities and character cannot supersede the life and safety requirements of the NFIP. Non-residential structures may either be *flood proofed*¹¹ as certified by a qualified professional or elevated to or above the *BFE*. Local NFIP compliant *floodplain management regulations*¹² and codes contain minimum flood construction performance

⁹ 44 CFR §59.1, Definitions of NFIP Terms, *Special Flood Hazard Area* – see “area of special flood hazard”., *Area of special flood hazard is the land in the flood plain within a community subject to a 1 percent or greater chance of flooding in any given year. The area may be designated as Zone A on the FHBM. After detailed ratemaking has been completed in preparation for publication of the flood insurance rate map, Zone A is usually refined into Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, or V1-30, VE, or V. For purposes of these regulations, the term “special flood hazard area” is synonymous in meaning with the phrase “area of special flood hazard”.*, <https://www.fema.gov/media-library/assets/documents/12437>, accessed October 12, 2018

¹⁰ 44 CFR §59.1, Definitions of NFIP Terms, *Base flood means the flood having a one percent chance of being equaled or exceeded in any given year*, <https://www.fema.gov/media-library/assets/documents/12437>, accessed October 12, 2018

¹¹ 44 CFR §59.1, Definitions of NFIP Terms, *Flood proofing means any combination of structural and non-structural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.*, <https://www.fema.gov/media-library/assets/documents/12437>, accessed October 12, 2018

¹² 44 CFR §59.1, Definitions of NFIP Terms, *Flood plain management regulations means zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as flood plain ordinance, grading ordinance and erosion control ordinance) and other applications of police power. The term describes such state or local regulations, in any combination thereof, which provide standards for the purposes of flood damage prevention and reduction.*, <https://www.fema.gov/media-library/assets/documents/12437>, accessed October 12, 2018

requirements that apply not only to new structures, but also to existing structures which are *Substantially Improved (SI)*¹³ or *Substantially Damaged (SD)*¹⁴.

Enforcing the *SI/SD* requirements is a very important part of a community's floodplain management responsibilities. There are many factors that local officials will need to consider and several scenarios they may encounter while implementing the *SI/SD* requirements. FEMA has developed FEMA's P-758, Substantial Improvement/Substantial Damage Desk Reference¹⁵ for FEMA and local floodplain administrators to provide practical guidance and suggested procedures to implement the NFIP requirements for *SI/SD*.

The NFIP includes a requirement that new buildings and *SI/SD* buildings be constructed in ways that minimize or prevent damage during a flood. This requirement grew out of the recognition that there were large numbers of pre-existing buildings already located in flood-prone areas that would continue to be subject to damage. The *SI/SD* requirement is similar to common zoning and code requirements that address non-conforming uses and structures, encouraging a locally driven community character, need, and political will. The non-conformance is allowed to continue until a triggering event occurs, such as a change in use or a proposal to undertake significant physical alterations. While similar, the NFIP requirements is specifically intended to protect lives and property from a known flood threat, therefore, floodplain management regulations are also distinctly different from zoning. The purpose of the *SI/SD* requirements is to protect the property owner's investment and safety, and, over time, to reduce the total number of buildings that are exposed to flood damage, thus reducing the burden on taxpayers through the payment of disaster assistance, and to protect people and property.

Types of work that may trigger *SI/SD* include:

¹³ 44 CFR §59.1, Definitions of NFIP Terms, *Substantial Improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage", regardless of the actual 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 code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or (2) Any alteration of a "historic structure", provided that the alteration will not preclude the structure's continued designation as a "historic structure".*, <https://www.fema.gov/media-library/assets/documents/12437>, accessed October 12, 2018

¹⁴ 44 CFR §59.1, Definitions of NFIP Terms, *Substantial Damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of the market value of the structure before damage occurred. Work on structures that are determined to be substantially damaged is considered to be substantial improvement, regardless of the actual repair work performed.*, <https://www.fema.gov/media-library/assets/documents/12437>, accessed October 12, 2018

¹⁵ FEMA Publication P-758, Substantial Improvement/Substantial Damage Desk Reference, 2010, <https://www.fema.gov/media-library/assets/documents/18562>, accessed October 12, 2018

- 1) Rehabilitation or remodeling of a building with or without modifying its external dimensions
- 2) Lateral additions that may or may not involve structural modifications of a building
- 3) Vertical additions
- 4) Repair of foundations, including replacing or extending foundations
- 5) Restoration or repair of damage *of any origin* that is necessary to restore a building to its pre-damaged condition
- 6) Reconstruction of demolished or destroyed buildings on the same site or on the same foundation
- 7) Work on post-Flood Insurance Rate Map (FIRM) buildings
- 8) Work on existing buildings where floodplain designations or floodways are revised

The intent of the *SI/SD* requirements is not to discourage routine maintenance. If work requires a Floodplain Development Permit, then the local official must review all of the work proposed and the cost of all work must be included in the project costs, including work that might otherwise be considered routine maintenance that might meet the NFIP definition of *development*¹⁶.

Understandably, owners are concerned about the costs of bringing buildings into compliance. NFIP flood insurance policies on buildings located in SFHAs include coverage that is available for buildings that are *SD* by flood through Increased Cost of Compliance (ICC).

FEMA Floodplain Management Bulletin on Historic Structures explains how the NFIP gives relief to historic structures from NFIP floodplain management requirements¹⁷. Provided such structures retain their historic designations, communities may not have to require them to be brought into full compliance as they apply *SI/SD*. To address the unique needs of preserving historic structures, communities may elect to use one (1) of two (2) approaches; either granting *variances*¹⁸ or exempting

¹⁶ 44 CFR §59.1, Definitions of NFIP Terms, *Development means any man-made 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.*, <https://www.fema.gov/media-library/assets/documents/12437>, accessed October 12, 2018

¹⁷ 44 CFR §60.3, https://www.fema.gov/pdf/floodplain/nfip_sg_appendix_e.pdf, accessed October 12, 2018

¹⁸ 44 CFR §59.1, Definitions of NFIP Terms, *Variance means a grant of relief by a community from the terms of a flood plain management regulation.*, <https://www.fema.gov/media-library/assets/documents/12437>, accessed October 12, 2018

Historic Structures from the *SI/SD* definition and requirements. In either case, *Historic Structures* may be excluded from the NFIP elevation and floodproofing requirements (applicable to non-residential only). Whichever approach is selected, it must be fully documented and used in all cases when improvements or repairs are proposed for *Historic Structures*. It is important to note that additions to *Historic Structures* that are located in *floodways*¹⁹ require additional attention. While additions may not have to meet the *SI* requirements, they must still satisfy the NFIP requirements related to *floodway* encroachments. A *floodway* encroachment analysis must be provided to demonstrate that an addition will not cause any increase in the *BE*. There are basically two (2) ways to apply this relief:

- 1) Through a variance process in applying the local ordinance in accordance with 44 CFR §60.6(a)²⁰:
 - a. FEMA has developed publication P-993, FPM Bulletin Variance – Variances and the National Flood Insurance Program²¹ to assist local government officials in reviewing requests for *variances* and determining if a request meets the minimum requirements of the NFIP as they apply 44 CFR §60.6. FEMA’s publication P-467-2, FEMA Floodplain Management Bulletin on Historic Structures; specifically the sections on “Minimizing the Impacts of Flooding on Historic Structures,” and “Protection Measures for Historic Structures,” provides examples on what is considered to be the minimum necessary to afford relief for *Historic Structures*.
 - b. Using this option allows communities to evaluate individual requests and place conditions on the *variance* to make *Historic Structures* more flood damage-resistant and to minimize flood damage that does not affect the historic character and design of the structure. For example whether elevation (or flood proofing for non-residential structures) a *Historic Structure* would destroy its character and cause it to lose its designation, a *variance* for the elevation requirement may be considered. However, the community must place conditions on the *variance* to minimize flood damage such as:

¹⁹ 44 CFR §59.1, Definitions of NFIP Terms, *Floodway* – see *regulatory floodway*. *Regulatory floodway* means 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 a designated height., <https://www.fema.gov/media-library/assets/documents/12437>, accessed October 12, 2018

²⁰ 44 CFR §60.6(a), “*Variances* may be issued for the repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure’s continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.”, https://www.fema.gov/pdf/floodplain/nfip_sg_appendix_e.pdf, accessed October 12, 2018

²¹ FEMA Publication P-993, Floodplain Management Bulletin Variances and the National Flood Insurance Program, July 2014, https://www.fema.gov/.../FEMA_P_993_FPM_Bulletin_Variance.pdf, accessed October 12, 2018

- i. Elevate all utilities and finished interior workings to or above the *BFE* or to the maximum extent possible or practically feasible;
 - ii. Use flood damage-resistant materials for interior and exterior improvements wherever possible; and
 - iii. Raise the interior floors to or above the *BFE* or to the maximum extent possible (this is often technically feasible in older structures with high ceilings).
 - iv. If repair or improvements result in the loss of the structure's historic designation, the structure would no longer qualify for the variance and would be required to meet the minimum NFIP floodplain regulations.
- 2) FEMA provides *potential* for local ordinances to exempt SI/SD for *Historic Structures*^{22 23}
- a. A provision of the NFIP provides relief for *Historic Structures* located in the *SFHA* as the definition of *SI* excludes, "any alteration of an *Historic Structure* provided that the alteration will not preclude the structure's continued designation as *Historic Structure*." The exclusion also applies to *Historic Structures* that have been *SD*. This provision allows communities to exempt historic structures from the *SI/SD* requirements of the NFIP.
 - b. When a community exempts a *Historic Structure* from the NFIP floodplain management requirements, it must document the process and maintain the documents in the community permit files.

There are some other considerations that should be applied:

- 1) No *Historic Structures* can be improved, repaired, or remodeled without being evaluated for compliance with both the requirements of the Historic Preservation Program and the NFIP.
- 2) Whether by *Variance* or *SI/SD* Exemption, deviations from the NFIP's minimum life safety and property protection provisions for *Historic Structures* is on a case-by-case basis, and may not be applied to all structures within a zone or district, and limited only to the extent that the life safety and property protection measure would jeopardize the historic designation. In either situation, the following is required:
 - a. Documentation that confirms the building is designated a *Historic Structure*

²² 44 CFR §206.226(f)(3)

²³ Section 6.5.1, Historic Structures, FEMA P-758, Substantial Improvement/Substantial Damage Desk Reference (2010), <https://www.fema.gov/media-library/assets/documents/18562>

- b. Documentation that confirms the proposed work will not preclude the structure's historic designation
 - c. Documentation to ensure that the *development* complies with both standards to the greatest extent possible; protecting lives and property while maintaining historic integrity
- 3) FEMA's publication P-467-2, FEMA Floodplain Management Bulletin on Historic Structures; specifically the sections on "Minimizing the Impacts of Flooding on Historic Structures," and "Protection Measures for Historic Structures," provides examples on what is considered to be the minimum necessary to afford relief for *Historic Structures*. These examples address both elevation and flood proofing.
- 4) Owners of *Historic Structures* should be aware that if physical alterations made to a *Historic Structure* may cause the structure to lose its official listing or historic status, the structure would no longer be a *Historic Structure* for the purposes of the NFIP and would be required to meet the floodplain management requirements of the local ordinance and or the minimum standards required for participation in the NFIP. A determination of whether the structural alternations would forfeit the historic designation should be made before requesting a permit. Owners should carefully consider the benefits of implementing measures to minimize flood damage.
- 5) The primary damage to buildings in a flood disaster is from immersion of building materials in floodwaters and the moving force of floodwaters that can cause structural collapse. Storm and sanitary sewer backup during flooding is also a major cause of flood damage to buildings. In addition, floods may cause a fire due to ruptured utility lines; result in the growth of mold and mildew; and lead to swelling, warping, and disintegration of materials due to prolonged presence of moisture. Although *Historic Structures* may be exempted from discrete aspects of the NFIP floodplain management requirements; flood mitigation measures must be a consideration to minimize flood damages when rehabilitating or repairing a *Historic Structure* as the risk could be complete loss of that *Historic Structure*. It may be better to relocate the structure and or reinforce its flood resistance than risk losing life, property, or the historic value of the structure as a result of a probable flood event(s).