

APPENDIX I – GLOSSARY

A Zones	A Zones are areas within the Special Flood Hazard Area identified on FIRMs as an area that has a 1 percent or greater annual chance of flooding. The A Zone may be identified on a FIRM with one of the following designations: AE, A1-30, AO, AH, or A. These areas include riverine floodplains, lacustrine (lake) floodplains, and coastal floodplains landward of V Zones.
Approximate A Zones	Areas not studied by detailed hydrologic/hydraulic methods. These areas are shown on a FIRM as “unnumbered A zones” and “approximate 100-year flood zones” on the Flood Boundary and Floodway Map (FBFM).
Base Flood Elevation (BFE)	The water surface elevation resulting from the base flood, (i.e., a flood that has a 1 percent chance of equaling or exceeding that level in any given year [100-year flood]).
Construction Type	
<i>Concrete</i>	Walls constructed of concrete block
<i>Frame</i>	Walls constructed of wood or light gauge metal studs, with wood, vinyl, or aluminum siding
<i>Masonry</i>	Walls constructed of brick
<i>Manufactured home</i>	Prefabricated frame structure constructed on a transportable frame
Disaster Mitigation Act of 2000 (DMA 2000)	The impetus for states and communities to undertake natural hazard mitigation planning was given a significant boost on October 30, 2000, when the President signed the Disaster Mitigation Act of 2000 (Public Law 106-390). To maintain eligibility for pre- and post-disaster grant funds, communities need to have a mitigation plan approved by FEMA that identifies risks from natural hazards and includes a strategy to address these problems.
Dry floodproofing	Measures that eliminate or reduce the potential for flood damage by keeping floodwaters out of the structure. Examples include installation of watertight shields for doors and windows, reinforcement of walls to withstand the hydrostatic and hydrodynamic pressures and debris impact, and use of sealants to reduce seepage of floodwaters through walls.

Elevation Datum	Elevation datum, or datum plane, is an arbitrary surface that serves as a common reference for the elevations of points above or below it. Elevations are expressed in terms of feet, meters, or other units of measure and are identified as negative or positive depending on whether they are above or below the datum plane. Three common elevation datum are mean sea level (msl), National Geodetic Vertical Datum (NGVD), and North American Vertical Datum (NAVD).
Erosion	The removal of soil that lowers the ground surface elevation across an area.
Flash flood	A flood that rises and falls very quickly and is usually characterized by high flow velocities. Flash floods often result from intense rainfall over a small area and can also occur in highly urbanized areas where pavements and other impervious improvements increase the volume and speed of runoff.
Flood fringe	The portion of the floodplain that lies beyond the floodway and serves as a temporary storage area for floodwaters during a flood. This section receives waters that are generally shallower and of lower velocities than those of the floodway.
Flood Hazard Boundary Map (FHBM)	An official map of a community published by FEMA that delineates the approximate boundary of the floodplain. An FHBM is generally the initial map provided to the community and is usually eventually superseded by a FIRM.
Flood Insurance Rate Map (FIRM)	An official map of a community, on which the Federal Emergency Management Agency has delineated both the special hazard areas and the risk premium zones applicable to the community. The map shows the extent of the base floodplain and may also display the extent of the floodway, as well as other relevant information such as Base Flood Elevations.
Flood Insurance Study (FIS)	An engineering study developed in conjunction with the FIRM. The FIS, also known as a flood elevation study, frequently contains a narrative of the flood history of a community and discusses the engineering methods used to develop the FIRM. The study also contains flood profiles for studied flooding sources and is used to provide accurate Base Flood Elevations for some areas.
Floodplain	Any land area susceptible to being inundated by the 1 % flood.
Floodplain Management Regulations	Regulations for development and land use within floodprone areas. Floodplain management regulations in communities that participate in the National Flood Insurance Program must be compliant with the NFIP requirements described in 44 CFR 60.3.

Flood Protection Elevation (FPE)	Elevation of the highest flood, including freeboard that a retrofitting method is intended to protect against.
Floodway	The channel of a river or other watercourse and that portion of the adjacent floodplain that must remain open to permit passage of the base flood without cumulatively increasing the water surface elevation more than a designated height (usually 1 foot).
Foundation Type	
<i>Basement</i>	Any area of the building having its floor subgrade (below ground level) on all sides.
<i>Crawlspace</i>	Low space below the first floor of a house, where there has not been excavation deep enough for a basement, but where there is often access for pipes, ducts, and utilities.
<i>Pier</i>	An upright support member of a building with a height limited to a maximum of three times its least lateral dimension. It is designed and constructed to function as an independent structural element in supporting and transmitting building and environmental loads to the ground.
<i>Pile</i>	An upright support member of a building, usually long and slender in shape, driven or jetted into the ground by mechanical means and primarily supported by friction between the pile and the surrounding earth.
<i>Post or Column</i>	Upright support units for a building, set in pre-dug holes and backfilled with compacted material. Posts are usually made of wood and columns are usually of concrete or masonry construction.
<i>Slab-on-grade</i>	A structural design where the first floor sits directly on a poured concrete slab, which sits directly on the ground.
Freeboard	An additional amount of height above the Base Flood Elevation used as a factor of safety (e.g., 2 feet above the Base Flood) in determining the level at which a structure's lowest floor must be elevated or floodproofed to be in accordance with state or local community floodplain management regulations.
Hazard Mitigation	Any sustained action taken to reduce or eliminate long-term risk to life and property from a hazard event.
Hydraulics	Hydraulics is used to determine how a quantity of water will flow through a channel or floodplain. Hydraulic analysis combines: <ul style="list-style-type: none"> • Flood hydrology, or discharges,

	<ul style="list-style-type: none">• Cross-section data on how much area there is to carry the flood, and• Stream characteristics such as roughness, slope, locations, and sizes of structures.
Hydrodynamic Loads	Forces imposed on an object, such as a structure, by water moving around it. Among these loads are positive frontal pressure against the structure, drag effect along the sides and negative pressure on the downstream side.
Hydrology	Hydrology deals with the distribution and circulation of water in the atmosphere, on land surfaces, and underground, and is used to determine flood flow frequencies. A hydrologic analysis determines the amount of rainfall that will stay in a watershed and the rate at which the remaining amount of rainfall will reach the stream.
Hydrostatic Loads	Forces imposed on a surface, such as a wall or floor slab, by a standing mass of water. The water pressure increases with the square of the water depth.
Increased Cost of Compliance (ICC)	NFIP flood insurance coverage for expenses that a property owner must incur, above and beyond the cost to repair the physical damage the structure actually sustained from a flooding event, to comply with mitigation requirements of state or local floodplain management ordinance or laws. Acceptable mitigation measures are elevation, floodproofing, relocation, demolition, or any combination thereof (<i>Flood Insurance Manual</i> , May 2003 [revised May 2004]).
Levee	Manmade structures, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water to provide protection from temporary flooding.
Map Modernization	Efforts being made by FEMA to update flood maps for the Nation to digital format and streamline FEMA’s responses to requests to revise them.
Market Value	The value of a structure based on the estimated price it would be sold by a willing seller to a willing buyer in the current real estate market.
Mitigation	Any sustained action taken to reduce or eliminate long-term risk to life and property from a hazard event.
Mitigation Planning	Hazard mitigation planning is the process of figuring out how to reduce or eliminate the loss of life and property damage resulting from natural hazards like floods, earthquakes, and tornadoes.

National Flood Insurance Program (NFIP)

Established in 1968 to help flood victims recover from the effects of flooding (Pub. L. 90-448, 42 U.S.C. 4001 et seq.), the NFIP is administered by FEMA. The NFIP is a government program that provides public benefits that go beyond what private sector insurance could achieve. Those who are at risk pay toward their own recovery so the financial burden is shifted away from disaster assistance programs funded by the general taxpayer. Flood insurance premium payments go into the National Flood Insurance Fund (NFIF), which in turn is used to pay claims resulting from flood damages. Those individuals with a flood insurance policy can receive the resources needed to clean and repair or replace their damaged property.

The concept of the NFIP is that flood insurance is made available in communities that regulate development in flood-hazard areas. In return for adoption and enforcement of the minimum NFIP regulations, the NFIP insures existing buildings with “subsidized” rates (i.e., flood insurance premium rates below the true risk based cost of the insurance coverage). The program has proven successful in reducing flood losses, especially to buildings constructed after communities began enforcing their regulations. It is estimated that over \$1 billion in damage is avoided each year because of the NFIP. The program has also saved disaster assistance programs billions of dollars.

For additional information on the NFIP, see the NFIP website address, <http://www.fema.gov/business/nfip/index.shtm>.

Post-FIRM structure

For insurance rating purposes, a post-FIRM building was constructed or substantially improved after December 31, 1974, or after the effective date of the initial Flood Insurance Rate Map of a community, whichever is later. A post-FIRM building in a participating community is required to meet the National Flood Insurance Program’s minimum Regular Program flood protection standards.

Pre-FIRM structure

For insurance rating purposes, a pre-FIRM building was constructed or substantially improved on or before December 31, 1974, or before the effective date of the initial Flood Insurance Rate Map of the community, whichever is later. Most pre-FIRM buildings were constructed without taking the flood hazard into account.

Repetitive Loss Properties

Repetitive Loss Properties are properties where two or more claims of more than \$1,000 have been paid by the NFIP in any consecutive 10-year period since 1978.

Scour	The removal of soil around objects that obstruct flow, such as foundation walls.
Severe Repetitive Loss Properties	<p>Severe repetitive loss properties are defined in the Bunning-Bereuter-Blumenauer Flood Insurance Reform Act of 2004 as insured repetitive loss properties that have received multiple flood insurance claims:</p> <ol style="list-style-type: none">1. Single-family properties. In the case of a property consisting of one to four residences, such term means a property that:<ol style="list-style-type: none">a. Is covered under a contract for flood insurance made available under this title; andb. Has incurred flood-related damage:<ol style="list-style-type: none">i. For which four or more separate claims payments have been made under flood insurance coverage under this title, with the amount of each such claim exceeding \$5,000, and with the cumulative amount of such claims payments exceeding \$20,000; orii. For which at least two separate claims payments have been made under such coverage, with the cumulative amount of such claims exceeding the value of the property.2. Multifamily properties. In the case of a property consisting of five or more residences, such term shall have such meaning as the Director shall by regulation provide.
Special Flood Hazard Area (SFHA)	An area within a floodplain having a 1 percent or greater chance of flood occurrence in any given year (100-year floodplain); represented on Flood Insurance Rate Maps by shaded areas with zone designations that include the letter A or V.
Substantial Damage (SD)	Substantial Damage is defined as damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damage conditions would equal or exceed 50 percent of the market value of the structure before the damage occurred.
Substantial Improvement (SI)	Substantial Improvement is 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 to the “start of construction” of the improvement. This term includes structures that have incurred “substantial” damage, regardless of the actual repair work performed.

V Zones

V Zones are areas identified on FIRMs as Zones VE, V1-30, or V. These areas, also known as Coastal High Hazard Areas, are areas along the coast that have a 1 percent or greater annual chance of flooding from storm surge and waves greater than 3 feet in height, as well as being subject to significant wind forces.

Wet floodproofing

Permanent or contingent measures applied to a structure and/or its contents that prevent or provide resistance to damage from flooding by allowing floodwaters to enter the structure. Such measures include the design of openings for intentional flooding of enclosed areas below the DFE, use of flood-resistant building materials below the DFE, and protection of the structure and its contents (including utilities).

This page left intentionally blank.