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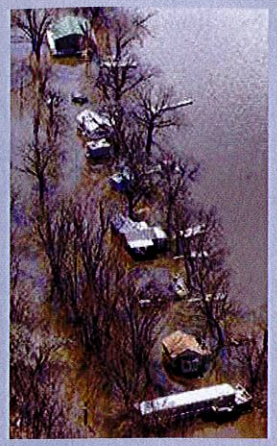


Living in the Floodplain

What You Need To Know – Who You Need To Know

Living in the Floodplain

What You Need To Know
Who You Need To Know

The Floodplain and Its Natural Values

Floodplains are lowland areas adjacent to lakes, wetlands and rivers that are covered by water during a flood. The most visible function of a floodplain is its ability to carry and store floodwaters. In Wisconsin, the primary cause of floods is excessive rain, snowmelt or a combination of the two.

Undeveloped floodplains also provide many other natural and economic resource benefits. Floodplains often contain wetlands and other areas important to a diverse, healthy ecosystem. Such areas provide opportunities for hunting, fishing and other recreational activities. By making wise land use decisions in the development and management of floodplains, beneficial functions are protected and negative impacts to the health of the environment are reduced.

In addition to floodplain zoning, floodplain areas that are also wetlands are protected by federal, state or local wetland protection laws. These laws regulate alterations to wetlands to preserve both the amount and quality of remaining wetlands. The wetland protection laws most common in Wisconsin are chapters NR 103 (Water Quality Standards for Wetlands), NR 115, (Shoreland Zoning) and NR 117, (Shoreland-Wetland Zoning) of the Wisconsin Administrative Code and the U. S. Army Corps of Engineers' Section 404 Permit Program. Your DNR Regional staff person can assist you in determining if wetlands are present on your property.

The values and benefits of undeveloped land located in floodplains include:

- Flood damage reduction;
- Recreational opportunities;
- Habitat for plants and animals;
- Water pollution reduction;
- Stormwater management;
- Erosion control;
- Preservation of cultural resources; and
- Outdoor education.

By understanding the regulations that affect the uses of the floodplain and its associated natural values, communities and landowners can make intelligent decisions and reduce the impacts on this important natural resource while maintaining property and aesthetic values.

Acronyms

Floodplain management uses many acronyms and terms. The following is a list of the most commonly used acronyms. Definitions of commonly used terms are listed later in this brochure.

BFE	Base Flood Elevation
BOA	Board of Appeals or Adjustment
CRS	Community Rating System
DFIRM	Digital Flood Insurance Rate Map
DNR	Department of Natural Resources
EAV	Equalized Assessed Value
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FIS	Flood Insurance Study
FPE	Flood Protection Elevation
LODR	Letter of Determination Review
LOMA	Letter of Map Amendment
LOMC	Letter of Map Change
LOMR	Letter of Map Revision
LOMR-F	Letter of Map Revision Based on Fill
NFIP	National Flood Insurance Program
RFE	Regional Flood Elevation
SFHA	Special Flood Hazard Area

What Should You Know About Buying, Owning or Building a House in a Floodplain

One of the goals of floodplain management is to minimize the threat to life and property resulting from flooding by promoting the preservation of floodplains for carrying and storing floodwaters and encouraging property owners to mitigate their flood risk by elevating, relocating, or otherwise floodproofing their structures. Ideally, floodplains should be maintained as open space for uses such as natural areas, trails, ball fields and golf courses.

Despite the risks and costs, people will continue to build in floodplains. Structures to be located in floodplains must not only be elevated above the flood protection elevation, but they must be placed so as not to diminish the ability of the floodplain to carry and store floodwater. Therefore the decision to buy an existing residence or build a new residence in the floodplain must be approached with great care. This brochure will provide the reader with the knowledge to make an informed decision about living in a flood-prone area.

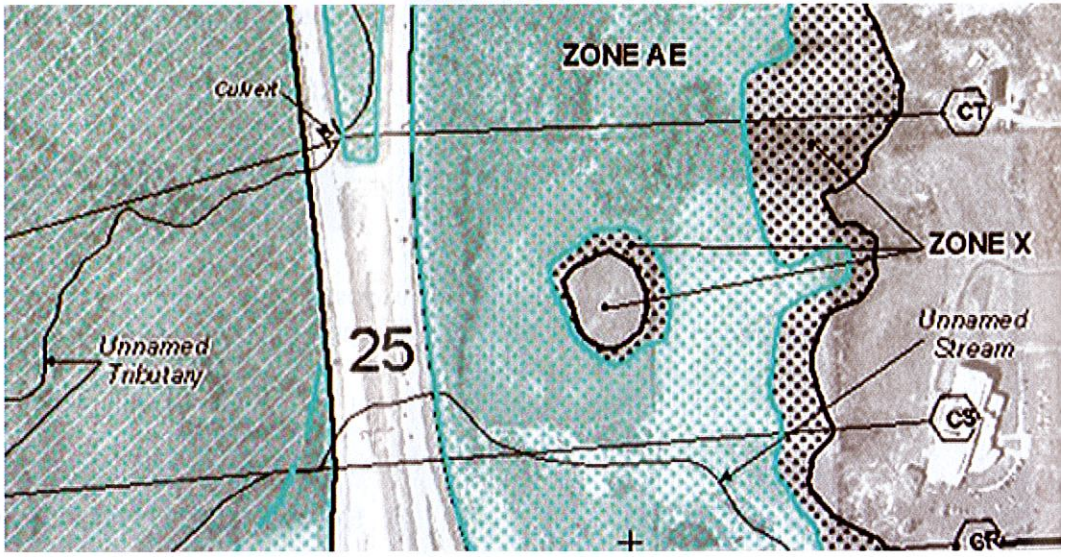
Floodplains are lowland areas adjacent to lakes, wetlands and rivers that are covered by water during a flood. For **floodplain management purposes**, the floodplain is the area covered by a flood that has a 1% chance of occurring in any given year, or the 100-year flood. In Wisconsin, the floodplain is officially mapped as the **floodway**, the **floodfringe** or the **general floodplain.**

The **floodway** is the river channel and areas immediately adjacent to the channel which are needed to pass the flow of the 1% chance flood. It is the area that experiences the deepest water and the highest flow velocities. Development is strictly regulated within the floodway. Most new structures are not allowed. Fill may be allowed if it is shown after engineering analysis that it causes no obstruction to flow and no increase in flood elevations.

The **floodfringe** is the part of the floodplain outside of the floodway. The floodfringe is primarily a floodwater storage area, so fill and elevated structures can be placed in this area. However, compensatory storage may be required. Depths and velocities of floodwater in floodfringe areas are generally lower than in the floodway. Most development activities are allowed in the floodfringe as long as structures are elevated above the regulatory flood protection elevation. **Local ordinances should be checked for greater restrictions or higher standards.**

Floodway and floodfringe areas are designated only after an engineering analysis has been performed and a 100-year flood elevation has been determined. They are labeled on the flood map below as either Zones A1-30 or Zone AE.

Due to the cost of these engineering analyses, some floodplain areas are mapped as **general floodplains**. The general floodplain is also called an approximate study area, unnumbered A Zone or Zone A. Due to the lack of 100-year flood elevations and floodway/floodfringe determinations in a general floodplain area, **it is the property owner's responsibility to pay for an engineering analysis to determine the flood zone before the community can authorize any development.**



Other zones are noted on flood maps. Descriptions of these zones can be found in the flood map *Legend.*

The 1% chance floodplain and related floodway, floodfringe and general floodplain areas are delineated on maps called Flood Insurance Rate Maps (FIRMs), Flood Hazard Boundary Maps (FHBMs) and Flood Boundary and Floodway Maps (FBFMs) published by FEMA. In 1988, FEMA began publishing combined FIRMs with all the information previously contained on the FIRMs and FBFMs. Copies of these maps are available through village, city and county offices. Federal, state and local government agencies, as well as lending institutions and insurance companies, use these maps to identify structures that are located in floodplain areas.

Development Standards

Wisconsin floodfringe development standards for new construction are:

- Lowest floor elevated on fill two feet or more above the RFE (basement floor can be at RFE);
- Fill must be one foot or more above RFE;
- Fill must extend 15 feet beyond the structure; and
- Structure must have dryland access.

Local ordinances may be more restrictive.

The two-foot freeboard (FPE) requirement is important to property owners for several reasons. Wisconsin has adopted the freeboard standard to protect life, health and property in dangerous floodplain areas. Because flood insurance rates are based on the elevation of a structure's lowest floor including basement, the freeboard standard also lowers a property owner's flood insurance costs dramatically. If flood elevations rise when an area is re-mapped the freeboard standard acts as a safeguard to ensure that existing structures do not become nonconforming and therefore subject to limitations on repairs and remodeling and potential lowering of market value.

Why is development in floodplains regulated?

Before 1968, floodplains were generally not regulated and flood insurance was not available to people living in flood-prone areas. During the 1950s and 1960s, massive flooding occurred across the United States, costing billions of dollars for flood disaster relief. The U. S. Army Corps of Engineers and other federal agencies found it increasingly difficult to identify cost-effective flood control projects. Something had to be done to stop the building of structures in flood-prone areas.

In 1968, Congress passed the National Flood Insurance Act and created the National Flood Insurance Program (NFIP). Under the NFIP, flood insurance is made available to all residents of communities that agree to adopt minimum building and zoning regulations for development in flood-prone areas. The primary standard under the NFIP is that new structures (or substantial improvements to existing structures) must be elevated so that the lowest floor of the entire structure (including basement) is above the elevation of the 1% chance flood.

The State of Wisconsin recognized early the costs associated with flooding. In 1966, the State enacted the Water Resources Act which required communities to zone their flood-prone areas to protect people and property. The floodplain management standards of the NFIP and the State of Wisconsin are very similar. The Wisconsin minimum standards can be found in Chapter NR 116 of the Wisconsin Administrative Code. The standards for the NFIP can be found at 44 CFR 60.3. The requirements of the NFIP and Wisconsin's standards are enforced at the local level through the adoption of a local floodplain ordinance. Local ordinances may be more restrictive than either the NFIP or ch. NR 116. The Wisconsin DNR and FEMA provide enforcement and technical assistance.

How can I find out if my house or property is located in a floodplain?

The best way to find out if a home or property is located in the floodplain is by visiting the local floodplain zoning administrator at the village, city or county government office where the property is located. The local official should have a copy of the floodplain map and study for the community. These maps and studies are usually the official source of information about whether a structure is located in the regulatory floodplain.

This information will show if a home or property is located in the floodplain and, more specifically, if it is located in the floodway or floodfringe. Not all communities have been designated by FEMA as flood-prone, so some do not have maps that show floodplains. Also, landowners should be aware that communities may contain substantial areas that are subject to flooding, but are not indicated as flood-prone on the official maps.

What are the benefits of owning or buying a properly elevated structure in the floodfringe?

If a community has been properly administering its floodplain zoning ordinance, structures constructed in the floodfringe since the community received its initial FIRM and adopted floodplain regulations will be properly elevated to the FPE and have dryland access. Compliant structures have a lower risk of being damaged by flooding.

Also, if the structure is in full compliance, normal upkeep and maintenance is allowed and repairs after damage can be made as long as all parts of the structure remain above the FPE. Improvements, such as additions, are allowed as long as they are properly elevated to the FPE.

Flood insurance may be required even for structures which have been properly elevated. However, the premium will be much lower than that charged for a structure which has not been elevated.

What are the consequences of owning or buying a nonconforming structure?

Any structure built prior to the original adoption of the floodplain zoning ordinance and which is not in compliance with current floodplain regulations is defined as a nonconforming structure. Most nonconforming structures are subject to the 50% rule, which states that if the cumulative value of structural modifications, repairs or additions exceeds 50% of the structure's current equalized assessed value (EAV) the entire structure must be brought into compliance with current floodplain regulations.

Floodway

New development is prohibited in floodway areas due to the water depth and velocity during flood events. If you are considering the purchase of a lot along a watercourse check to ensure that there is a buildable area outside the floodway.

Owners or purchasers of floodway structures should be aware that structural improvements are limited because they may cause additional blockage of flood flows. Ordinary maintenance and repairs are allowed without limit. There are also restrictions on repairing damaged structures. If the cost of repair including labor **from any type of damage is less than 50%** of the structure's pre-damage EAV, then the structure **may be repaired to its pre-damage condition.**

If the damage to a floodway structure **from a flood equals or exceeds 50%** of the structure's pre-damage EAV, the structure must meet the current local ordinance standards. This means **the structure must be moved out of the floodway.**

If the **damage to a floodway structure is caused by a source other than flooding and the damage equals or exceeds 50%** of the pre-damage EAV, the structure **may be restored to its pre-damaged condition.** However, the structure **must meet minimum NFIP standards** (lowest floor and utilities elevated to RFE and constructed using flood resistant materials). If the rebuilt structure violates the floodplain ordinance, the owner could be subject to legal action by the community and any insurance premium subsidy could be lost.

Floodfringe

Additions and modifications to nonconforming structures in the floodfringe are allowed with certain restrictions. An addition or modification cannot raise existing flood elevations, as determined through a study by a licensed engineer. Also, the addition or modification must have a low flood damage potential. Therefore, any additions or modifications which go beyond the boundaries of the existing structure's footprint must be elevated or floodproofed to the FPE.

Limits are placed on the total cost for additions and modifications to nonconforming structures. If the cost limits are exceeded, the structure must meet all current zoning requirements. For floodfringe properties, this means the structure must be elevated to the FPE and have dryland access.

What should I know about flood insurance?

A structure located in a flood zone has a 26% chance of being damaged by a flood over a 30-year mortgage. Standard property/casualty insurance policies do not cover damage caused by flooding. Flood insurance can be purchased by any property owner or renter in a community participating in the NFIP, whether or not the property is in the floodplain. Flood insurance coverage for contents is available, however it must be requested as a separate coverage when purchasing a flood insurance policy.

Flood insurance is a pre-requisite for federally backed loans and for most forms of disaster assistance for structures located within a mapped floodplain. Structures built prior to the first identification of the property in a floodplain on a community's FIRM are eligible for Pre-FIRM rates which are subsidized by FEMA. For structures located in the floodplain, flood insurance should be purchased for the full replacement cost of the structure.

Homeowners can purchase flood insurance coverage for up to $250,000 in structural damage and $100,000 for contents. Renters can purchase up to $100,000 for contents coverage. Businesses can purchase up to $500,000 in building and contents coverage. Flood insurance is available for condominiums. However, separate policies must be purchased for both the common areas and the individual units. Group policies are available.

Residents of floodplain areas should remember that federal, state and local floodplain regulations are only designed to protect structures from a 1% chance flood. Floods larger than a 1% chance event can and do occur. For this reason, carrying flood insurance may be a good idea even if it is not required. Flood insurance premiums for properly elevated structures are even less costly than the subsidized premiums.

All flood insurance policies have a rider for Increased Cost of Compliance (ICC). The ICC rider provides policy holders with up to $30,000 to assist with the cost of bringing their substantially damaged homes or businesses into compliance with local floodplain ordinances. The rider becomes effective only if the structure has suffered flood damage equaling or exceeding 50% of its equalized assessed value.

Communities interested in reducing flood insurance costs for property owners and residents should consider joining FEMA's Community Rating System (CRS). The CRS is an incentive program which rewards the adoption of progressive flood protection practices by reducing flood insurance premiums by up to 45%.

For more information regarding joining the CRS Program, contact either Scott Cofoid, CRS/ISO Specialist at 815-220-1002 or FEMA Region V CRS Specialist at 312-408-5230. Information and applications can be found on FEMA's website www.fema.gov and typing in *CRS* under Search.

Who should I talk to?

You should always start with the community's zoning administrator or building inspector. This person is knowledgeable about the specifics of the community's floodplain zoning ordinance. They have the maps needed to determine whether a property is located in the floodway, the floodfringe or general floodplain area. Also, communities are required to maintain copies of LOMAs, LOMRs and Elevation Certificates.

You should also contact your insurance agent. Most major insurance companies write flood insurance policies for the NFIP. Insurance agents can quote rates for flood insurance based on the location and elevation of the structure.

Lenders are another source of information. If you are borrowing money to purchase or refinance a property, the lender is responsible for determining whether the property is located in the floodplain for flood insurance purposes and informing the purchaser of the flood zone determination. If a structure is located in a floodplain, flood insurance is required to close the loan unless a LOMC has been issued.

The DNR Regional staff person in your area or the DNR Floodplain Management staff in Madison are also available to answer questions about owning, buying or building a home in the floodplain. Be sure to ask about other rules that may apply to the property, such as shoreland zoning and public waters/wetland rules. Contact information for DNR offices can be found in this brochure.

Information regarding floodplain management in Wisconsin can be found at: http://dnr.state.wi.us/org/water/wm/dsfm/flood/. Information regarding flood insurance can be found at either FEMA's main website: www.fema.gov or the NFIP website: www.floodsmart.gov.

What are Letters of Map Change?

Letters of Map Amendment (LOMA), Letters of Map Revision (LOMR) and Letters of Map Revision Based on Fill (LOMR-F) are documents issued by FEMA that officially remove a property and/or structure from the SFHA. They are collectively called Letters of Map Change (LOMC). To obtain a LOMC, the applicant must submit mapping and survey data for the property. Some data may be obtained from local government offices (e.g., the City Hall, County Courthouse, etc.). In most cases, the applicant will need to hire a registered land surveyor to prepare an Elevation Certificate for the property. Upon receiving a complete application, FEMA normally completes its review in 4 to 6 weeks.

LOMCs may be issued for a single structure/lot or multiple structures/lots. All LOMCs remove a structure or lot from the regulatory floodplain for flood insurance purposes. A structure or lot removed from the SFHA by a LOMC is not subject to the requirements of the NFIP and may be exempt from the requirements of ch. NR 116.

A LOMA is typically a correction to a flood map and is issued based on better survey data showing that a property's natural lowest grade is above BFE. A property owner will often request a LOMA after being informed by a lending institution that the property is believed to be within a SFHA. FEMA does not charge a fee for reviewing applications for a LOMA.

A LOMR is a revision to a flood map based on technical engineering studies submitted by the applicant. LOMRs are typically issued for complex or large scale projects such as subdivisions, stream relocations and road/bridge projects. FEMA does charge a fee for reviewing a LOMR application.

Under federal regulations, a property can be removed from a mapped floodplain if it is filled to an elevation that is at or above the BFE. Under federal regulations, a property can be removed from a mapped floodplain if it is filled to an elevation that is at or above the BFE. A LOMR-F is a concurrence from FEMA that the data submitted by the applicant meets this standard and waives the flood insurance purchase requirement.

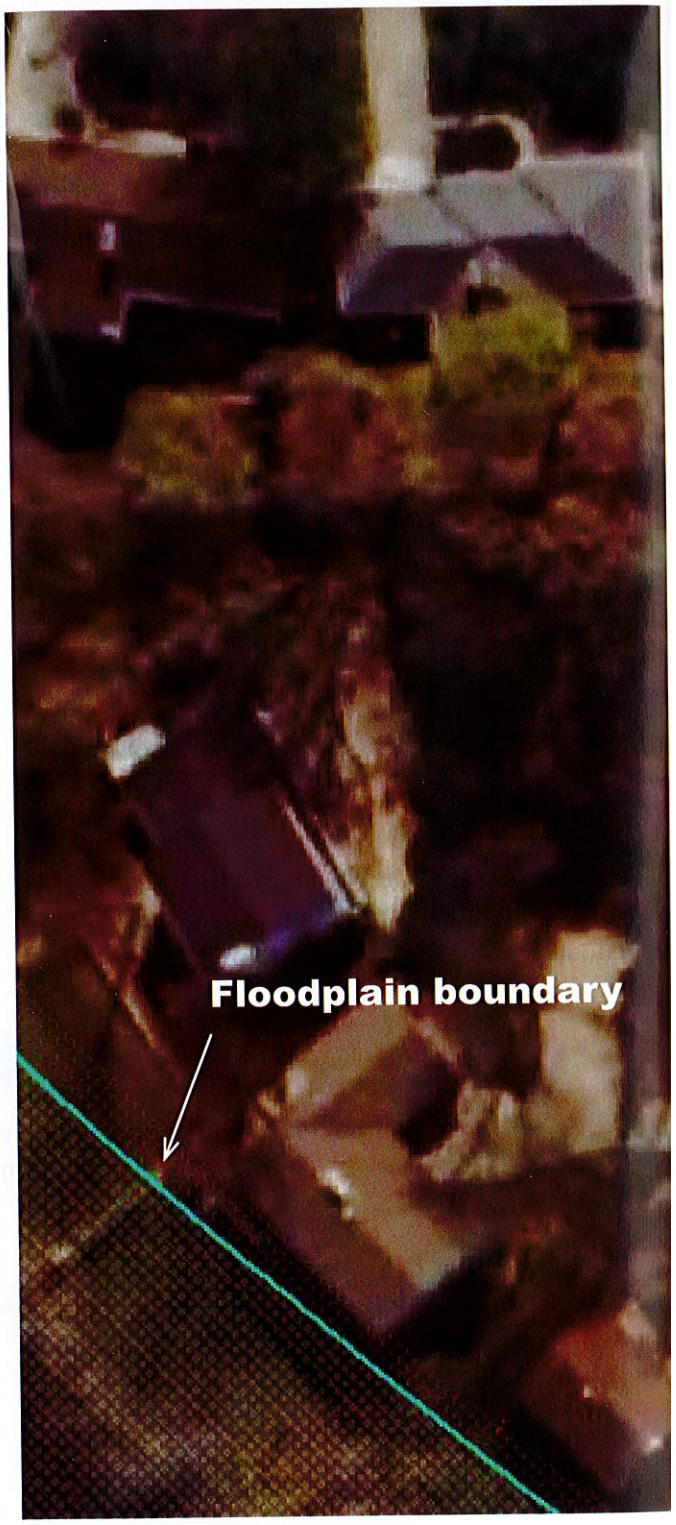
Under Wisconsin regulations, a property can only be removed from the floodplain if the building site is filled to the FPE, is contiguous to lands outside the floodplain and a land use permit for fill is obtained.

Unless a LOMR-F and a land use permit are obtained prior to the start of any construction on the property, state and federal regulations would still apply.

A property owner may also request a Letter of Determination Review (LODR) from FEMA if they believe the structure was incorrectly determined to be in a SFHA by a lender. A LODR is not a LOMC. It is FEMA's comment on the determination made by the lender or third party that the borrower's structure is in a SFHA. A request for a LODR must be submitted within 45 days of the date of the lending institution's notification that a building is in the SFHA and flood insurance is required. FEMA charges a fee for reviewing a request for a LODR.

Communities are required to maintain copies of all LOMCs issued by FEMA because they represent changes to the effective FIRM. LOMCs are usually filed with a community's floodplain zoning map and other related technical data.

Copies of LOMCs can be obtained from local building officials, zoning administrators, DNR Regional staff or FEMA. Instructions and forms for LOMCs, LODRs, Elevation Certificates and Standard Flood Hazard Determinations can be downloaded from FEMA's website at www.fema.gov and typing in *NFIP Forms* under Search.



Definitions

100-year Floodplain—The boundary of a flood that has a one-percent chance of being equaled or exceeded in any given year.

Accessory Structure—A detached subordinate structure that is incidental to the principal structure and is located on the same lot as the principal structure.

Base Flood—The flood having a one-percent chance of being equaled or exceeded in any given year. Also known as the 100-year flood or in Wisconsin as the regional flood.

Basement—Any enclosed area of a building having its floor sub-grade (below ground level) on all sides.

Board of Appeals/Adjustment—A locally appointed board authorized to hear and approve requests for variances, special exceptions or appeals of decisions made by the local zoning official.

Certificate of Compliance—A document issued by a community certifying that the construction of a building, the elevation of fill, or the lowest floor of a structure is in compliance with all ordinance provisions.

Development—Any 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.

Digitized Flood Insurance Rate Map—The FIRM in an electronic format.

Equalized Assessed Value—The value of a structure or parcel of property as determined by the local assessor with any adjustments made to account for an assessment that does not reflect full value.

Federal Emergency Management Agency—The federal agency which provides emergency disaster services and which administers the National Flood Insurance Program (NFIP).

Floodfringe—The floodplain area outside of the floodway that is covered by standing floodwater during a regional flood.

Flood Insurance Rate Map—The official map of a community showing Special Flood Hazard Areas (SFHA) and the risk premium zones (100- and 500-year elevations, floodway/fringe boundaries). Information on the map is based on historic, meteorological, hydrologic, and hydraulic data as well as open-space conditions, flood-control works, and development.

Flood Insurance Study—An engineering examination, evaluation and determination of the local flood hazard areas. The study is the basis for the flood maps.

Flood Protection Elevation—An elevation of two feet above the regional flood elevation.

Floodproofing—Any modifications to properties and structures subject to flooding for the purpose of reducing or eliminating flood damage.

Floodway—The channel of a river and adjoining areas required to carry the regional flood discharge.

Letter of Map Amendment—An official amendment by letter to an effective FEMA map. This establishes a property's location in relation to Special Flood Hazard Areas (SFHA).

Letter of Map Revision—An official revision by letter to an effective FEMA map, which may change flood insurance risk zones, floodplain boundary delineations, planimetric features or BFEs.

Letter of Map Revision Based on Fill—An official revision by letter to an effective FEMA map, which is caused by the placement of fill on the property and which may change flood insurance risk zones, floodplain boundary delineations, planimetric features, or BFEs.

Manufactured/Mobile Home—A building transportable in one or more sections that is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to utilities; includes "double-wides." Does not include recreational vehicles.

Mobile Recreational Vehicle—A recreational vehicle that is carried, towed, or self-propelled, is licensed for highway use (if registration is required), and is always capable of being driven or towed by a licensed vehicle.

National Flood Insurance Program—A federal program that makes flood insurance available to owners of property and renters in participating communities nationwide through the cooperative efforts of the federal government and the private insurance industry. The NFIP encourages state and local governments to exercise sound floodplain management to reduce losses caused by flooding.

Nonconforming Structure—An existing lawful structure that is not in conformity with the dimensional or structural requirements of ordinances adopted after the structure's construction.

Regional Flood Elevation—The water surface elevation shown on a floodplain map that has a one-percent chance of being equaled or exceeded in any given year. Shown as BFE (base flood elevation) on FIRM.

Structure—Any man-made object with form, shape, and utility either permanently or temporarily attached to or placed on ground, a riverbed, a streambed, or lakebed.

Special Flood Hazard Area—The land area covered by the floodwaters of the base flood.

Substantial Damage—Damage of any origin sustained by a structure where the cost of restoring the structure to its pre-damaged condition would equal or exceed 50 percent of the equalized assessed value of the structure before the damage occurred.