

HOW CAN I REVIEW A FLOOD MAP THAT IS BEING UPDATED?

After an engineering study has been completed, FEMA will provide preliminary versions of the updated map panels and the accompanying Flood Insurance Study report to community officials for review and comment and hold public meetings to present the results of the engineering studies. If new or modified Base Flood Elevations or base flood depths are proposed, FEMA will initiate a statutorily required 90-day appeal period.

The 90-day appeal period begins on the date of the second publication of proposed Base Flood Elevations in the local newspaper. During the appeal period, any owner or renter of real property affected by the proposed elevations within the community may file a written appeal based on a demonstration that the elevations proposed by FEMA are scientifically or technically incorrect.

To determine whether a map update is in progress in your community or to view the preliminary version of the map and report, please contact your local floodplain administrator or visit your Community Map Repository; for assistance in locating the Community Map Repository, please call the FEMA Map Assistance Center at the number shown below.

After community and public reviews have been completed and appeals have been addressed, FEMA publishes final versions of the map and report and distributes printed copies to the community. The new map and report are available for review or purchase online through the FEMA Flood Map Store at <http://msc.fema.gov>.

If you would like a FEMA Map Specialist to assist you with requesting a change to the NFIP map for your community, please call the FMAC, toll free, at 1-877-FEMA MAP (1-877-336-2627).



FOR MORE INFORMATION

- For more information on the NFIP, please read "Answers to Questions About the NFIP," which can be found on the FEMA website at www.fema.gov/business/nfip/qanda.shtm or may be ordered by calling 1-800-480-2520.
- For more information on flood insurance, including information on the Preferred Risk Policy, please visit www.floodsmart.gov or the "NFIP Publications" page at www.fema.gov/business/nfip/libfacts.shtm.
- For more information on flood hazard mapping products and processes, including tutorials on map change request procedures, please visit the "Flood Hazard Mapping" page at www.fema.gov/plan/prevent/fhm.
- For more information on floodplain management, please visit the "Floodplain Management" page on the FEMA website at www.fema.gov/plan/prevent/floodplain/index.shtm.

UNDERSTANDING FLOODING

When flooding occurs, one question is always in the forefront: why did it flood? Unfortunately, there is not one simple answer.

Four different types of floodplains (valley, major river, shallow, and coastal), each with its own characteristics, are illustrated in the first four diagrams below. The last diagram (ponding/overland) illustrates the type of flooding caused by intense rainfall where no identifiable floodplain exists. This flooding occurs when street drainage systems cannot move the stormwater to the nearest channel because too much rain falls in a short period.

SOME FACTORS THAT AGGRAVATE FLOODING INCLUDE:

- Development
- River or Stream Changes
- Erosion
- Poor Channel Maintenance

Through wise floodplain management, communities can protect their citizens against much of the devastating financial loss and emotional toll caused by flood disasters. To address the flood risk to their own properties, residents and business owners are encouraged to purchase and maintain flood insurance policies and to consider floodproofing or other protective measures.

TYPES OF FLOODPLAINS



The ground in this type of area is more "defined," with creek valleys. Flooding can be very deep and usually extends for a few days.



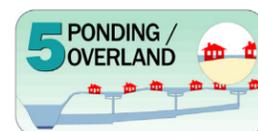
The floodplain along major rivers can be large, deep, and swift, and flooding conditions may last a week or more.



Shallow floodplains affect thousands of residences and businesses. When the channel capacity is exceeded, flooding begins. This flooding usually lasts hours, rather than days.



Coastal flooding occurs when storm events coincide with unusually high tides or a hurricane surge floods low-lying areas. High water levels are usually accompanied by waves capable of causing significant structural damage.



This type of flooding is not restricted to any one area of the U.S. or to any one area of a community. It can occur almost ANYWHERE. When intense local rainfall exceeds storm sewer or roadside ditch capacity, the water can "pond" in the streets deep enough to flood residences that are not even near a creek or bayou. The water will seek a path to the channel by flowing overland (sheet flow).

www.FloodSmart.gov
An official site of the
National Flood Insurance Program

Why We Map Flood Risks

A Guide to Floodplain Management & Flood Insurance



During a 30-year mortgage, property owners located in high-risk flood zones have a 26% chance of experiencing flood damage.

Homeowners insurance does not cover flood damage.

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www.fema.gov



FEMA

WHAT IS THE NATIONAL FLOOD INSURANCE PROGRAM?

Congress created the National Flood Insurance Program (NFIP) in 1968 as an alternative to taxpayer-funded disaster relief for flood victims. Administered by the Department of Homeland Security, Federal Emergency Management Agency (FEMA), the NFIP enables property owners in participating communities to purchase flood insurance as a financial protection against flood losses. In exchange, States and communities adopt floodplain management regulations designed to reduce flood risks and future flood damage.



FREQUENTLY ASKED QUESTIONS

WHO CAN PURCHASE FLOOD INSURANCE?

Anybody in a community participating in the NFIP.

WHERE CAN I PURCHASE FLOOD INSURANCE?

Any licensed casualty insurance agent in your State can sell you an NFIP policy. Call **1-888-225-5356** for more information.

WHAT SHOULD I DO NOW?

Every property has some risk of flooding, even properties that are not located near a known flooding source such as a river, ocean, or lake. You may also view preliminary and effective flood hazard data through the National Flood Hazard Layer (NFHL), which contains FEMA's flood hazard data, and provides all available effective digital flood hazard data in a format that can be applied to engineering software and applications like Google Earth™. For detailed instructions on using the NFHL in Google Earth visit www.fema.gov/library/viewRecord.do?id=3289.

As a property owner or renter, you should learn the flood risk for your residence or building by reviewing the NFIP flood map for your community. You can view copies of the flood map in either draft (preliminary) or final (effective) form, at the Community Map Repository, which is usually maintained by the floodplain administrator or other community officials at the planning and zoning office. You can view the final (effective) NFIP flood map for your community on the FEMA Map Service Center (MSC) website, <http://msc.fema.gov>. You can also order a copy of the effective flood map for your community through this website or by calling the MSC, toll free, at **1-800-358-9616**. The address of the Community Map Repository is provided on most NFIP flood maps; for assistance in locating the Community Map Repository, please call the FEMA Map Assistance Center, toll free, at **1-877-FEMA MAP (1-877-336-2627)**.

WHY SHOULD I PURCHASE FLOOD INSURANCE?

Homeowners or rental insurance does not cover flood damages. Floods may occur even in areas designated as moderate or minimal risk. Approximately 25 percent of all flood insurance claims occur in these areas. FEMA encourages you to maintain flood insurance coverage, even if you are not required to do so by law. You may be eligible to pay much less for flood insurance coverage if the property is located in an area that has been designated as a moderate- or minimal-risk area. Contact your insurance agent to discuss the pricing options.

WHAT ROLE DOES THE FLOOD INSURANCE RATE MAP PLAY IN THE PROGRAM?

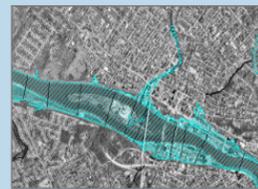
As the Federal agency responsible for administering the NFIP, FEMA identifies flood hazards, assesses flood risks, and provides appropriate flood hazard and risk information to communities nationwide. This information is provided to communities in the form of maps, called Flood Insurance Rate Maps (FIRMs).

FIRMs are used for determining where flood insurance must be purchased and how much that insurance will cost. Federally regulated or insured lenders are obligated to require flood insurance for all structures located in high-risk areas, as shown on the FIRM, and used to secure a loan.

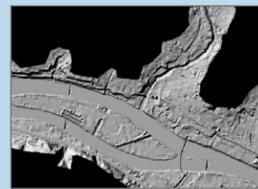
FIRMs reflect the results of engineering studies, called Flood Insurance Studies, prepared for FEMA by other Federal agencies, State and local partners, and private-sector

engineering companies. As a result of these studies, which include examinations of historical records, topographic surveys, and other data, base flood elevations (1-percent-annual-chance) are determined using computer models and statistical methods. The base flood is the flood that has a 1-percent chance of being equaled or exceeded in any given year. Along rivers, streams, and lakes, these elevations indicate the level at which flooding is expected to occur during the 1-percent-annual-chance flood event. Along the coast, they are the result of the analysis of storm surge, wind direction and speed, wave heights, and other factors.

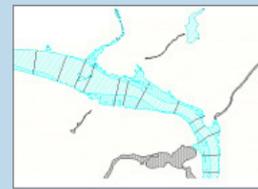
FEMA is in the process of updating and modernizing existing FIRMs for most of the United States. The components of these modernized maps, called Digital Flood Insurance Rate Maps (DFIRMs), are shown below.



Base Map Data



Topographical Data



Flood Data



Final Composed Digital FIRM (DFIRM)

FIRMs are used an estimated 30 million times annually for:

- Enforcing State and community floodplain management regulations
- Calculating flood insurance premiums
- Determining whether property owners are required by law to obtain flood insurance as a condition of obtaining mortgage loans or other Federal or federally related financial assistance

They are also used by States and communities for emergency management, land-use, and water resource planning, and by Federal agencies implementing Executive Order 11988 for Floodplain Management.

The NFIP is a public safety program implemented at the local level

Through the NFIP, property owners and renters in participating communities are able to insure themselves against flood losses. By employing wise floodplain management, NFIP communities can help protect citizens from future flood disasters. Careful local management of development in the floodplains results in construction practices that can reduce future flood losses and the high costs associated with flood disasters and to reduce the emotional toll experienced by citizens when their personal property is damaged by flood waters.

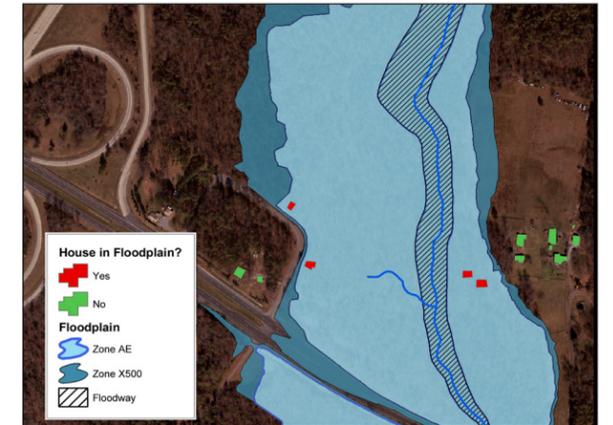
How to obtain a flood map

Flood maps may be viewed online through the FEMA Map Service Center (MSC) website <http://msc.fema.gov>. FIS reports, DFIRM Spatial Databases, and related products also may be downloaded from the MSC website. In addition to obtaining the full-scale paper or digital flood maps, you can also create a FIRMette on the MSC website. A FIRMette is a full-scale version of a particular flood map that a user creates by selecting a desired area from the online image of a particular flood map. In addition to the area of interest, the FIRMette includes the map title block, north arrow, and scale bar. There is no cost for producing a FIRMette, and the FIRMette can be used for many aspects of the NFIP including floodplain management, flood insurance, and enforcement of mandatory flood insurance purchase requirements. Additionally, you can obtain printed copies of mapping products for a particular community through the MSC. You can contact them toll free, at **1-800-358-9616**; by facsimile transmission, toll free, at **1-800-358-9620**; or by submitting the request in writing to the address below.

Federal Emergency Management Agency, Map Service Center, P.O. Box 1038, Jessup, Maryland 20794-1038.

HOW DO I CHANGE THE FLOOD MAP?

FEMA exercises great care to ensure that the analytical methods used for its engineering studies are scientifically and technically correct.



Sample of Digital Flood Hazard Data

Even so, FEMA recognizes that changes to flood maps might be necessary. Therefore, FEMA has established procedures for property owners who believe they have been incorrectly included in a high-risk area known as a Special Flood Hazard Area (SFHA) on the flood map.

Property owners interested in having FEMA examine the SFHA designation for their property can submit technical data and supporting documentation to FEMA in support of a map change referred to as a map amendment. If the documentation supports



Sample Letter of Map Amendment (LOMA)

it, FEMA will issue a formal decision in the form of a Letter of Map Amendment (LOMA), removing the SFHA designation from the property. The LOMA will amend the currently effective flood map, thereby removing the Federal mandatory flood insurance purchase requirement; however, lenders may still opt to require flood insurance as a condition of any mortgage. Even if the SFHA

designation has been removed from a property, flooding can still occur and maintaining flood insurance is highly recommended. As a result of a LOMA, the property owner may be eligible for a lower-cost policy referred to as a Preferred Risk Policy.

FEMA has a similar process for properties that have been elevated by the placement of earthen fill. The document issued by FEMA for these cases is called a Letter of Map Revision Based on Fill (LOMR-F).

In making amendments and revisions, FEMA adheres to the same engineering standards applied in the preparation of the effective flood map and related products. The supporting data and documentation for LOMA and LOMR-F requests and other types of map revision requests are required to ensure that the flood hazard and risk information for a community is scientifically and technically correct.

Additional information about map changes, including the current fee schedule for map change requests, is available by calling the FEMA Map Assistance Center, toll free, at **1-877-FEMA MAP (1-877-336-2627)** or visiting www.fema.gov/plan/prevent/fhm/fmc_main.shtm.