



## Information about the NFIP for Home and Property Owners\*

Flooding in Vermont can be caused by heavy rains, melting snow, storm water runoff, inadequate drainage, or failed dams and levees. Floods are natural occurring events, and provide several important ecosystem functions. However, every year Vermonters face safety risks and loss of property due to flooding along our lakes, ponds, rivers and streams. The [National Flood Insurance Program \(NFIP\)](#) is a FEMA program that relies on the cooperation of federal, state and municipal partners to properly manage our floodplains and reduce flood risk and damage. This is done by encouraging alternatives to developing in the floodplain, and regulating floodplain development to minimize risks and damages in the absence of these alternatives. If enrolled in the NFIP, your community has adopted bylaws for regulating floodplain development, and community members are able to purchase flood insurance. To find out if your town participates in the NFIP, check FEMA's [Community Status Book Report](#).

### What is a Special Flood Hazard Area (SFHA)?

In support of the NFIP, FEMA has identified flood hazard areas throughout Vermont by producing Flood Hazard Boundary Maps (FHBMs) or Flood Insurance Rate Maps (FIRMs) for each town. The high-risk area defined as any land that would be inundated by a flood having a 1-percent chance of occurring in any given year (also referred to as the base flood) is called the Special Flood Hazard Area (SFHA).

SFHAs are a useful tool for identifying risk associated with the inundation of floodwater. It is important to note that the potential for flood damage due to bank erosion, inadequate drainage, runoff, and storms larger than the base flood are not taken into account on these maps. In addition, a vast quantity of smaller Vermont streams do not have mapped SFHAs. Even if you are not in a SFHA, you may have substantial flood risk. *Any homeowner or renter in a municipality that participates in the NFIP is eligible to purchase flood insurance, regardless of whether or not they are in a SFHA.*

### How do I know if my home or property is in a Special Flood Hazard Area (SFHA)?

Start by obtaining a copy of the Flood Insurance Rate Map (FIRM) or Flood Insurance Study (FIS) for your area. You can view maps by contacting your town offices, which are required by the NFIP to have the FEMA maps for public reference and use. The effective NFIP maps for your community should be reviewed prior to any development or construction to confirm whether the site in question is located within a SFHA. Please note that the definition of development in a flood hazard area includes "any man-made change to improved or unimproved real estate."

---

\* If viewing a hard copy of this document, please be aware that it contains many imbedded internet links. You can access the document online at [http://www.anr.state.vt.us/dec/waterq/rivers/docs/rv\\_z\\_homeowners2.pdf](http://www.anr.state.vt.us/dec/waterq/rivers/docs/rv_z_homeowners2.pdf)

A FIRM and FIS can be viewed on-line at the [FEMA Map Service Center](#). To learn how to use them, click the following links; "[How to read a FIRM](#)" and "[How to read a FIS](#)". You can obtain maps by calling the FEMA Map Service Center toll-free at 1-800-358-9616.

In many cases it will be easy to determine whether or not you are in the floodplain. If your structure appears to be close to the edge of the floodplain and there is a question as to whether it is in or out, you should hire a licensed surveyor or engineer to provide better and more detailed data to the town and FEMA. The boundaries of the SFHA on the FEMA maps are an approximation of the true base floodplain, a surveyor or engineer can determine whether you are truly in the SFHA by comparing the base (100 year) flood elevation (BFE) from the Flood Insurance Study to the elevation of the ground at the lowest end of your structure or development site.

## **What are the different flood hazard zone designations and what do they mean?**

In many areas, FEMA has divided the SFHA into two areas; the **floodway** and **flood fringe**. The floodway is the stream channel and the portion of adjacent floodplain that must remain open to permit passage of the base flood, and to prevent increases in flooding downstream. Floodwaters are generally deepest and fastest in the floodway. Any development in the floodway is strictly prohibited unless it can be shown with detailed hydrologic and hydraulic analyses that that development will not cause a rise in downstream floodwater. The remainder of the SFHA is called the flood fringe. Development may take place within the flood fringe, provided the development complies with local floodplain management ordinances, which must meet minimum NFIP requirements.

SFHAs for a vast majority of Vermont water bodies are described as Zone A, AE, or A1-30. **Zone A** corresponds to the 1% annual chance floodplain determined in the FIS by approximate methods of analysis. Because detailed hydraulic analyses were not performed for such areas, no BFEs or depths are shown within this zone. Your local official in charge of floodplain management should require you to provide a BFE to give proof that your development is reasonably safe from flooding. Obtaining a Letter of Map Change from FEMA in Zone A also requires the development of a BFE. Please refer to FEMA's "[Guide for Obtaining and Developing BFEs](#)" (pdf, 1.7mb). **Zone AE and A1-A30** corresponds to the 1% annual chance floodplain determined in the FIS by detailed methods of analysis. In most instances, BFEs derived from detailed hydraulic analyses are shown at selected intervals within this zone. Many maps with Zone AE or Zone A1-30 also have a designated floodway.

**Zones B, C, and X** correspond to areas outside the 1% annual chance floodplain, areas of 1-percent annual chance sheet flow flooding where average depths are less than 1 foot, areas of 1-percent annual chance stream flooding where the contributing drainage area is less than 1 square mile, or areas protected from the 1-percent annual chance flood by levees. No BFEs or depths are shown within this zone. Insurance purchase is not required in these zones, but is available if your town participates in the NFIP.

## **What do I need to do to proceed with a development project in a SFHA?**

If your community participates in the NFIP and your property is in the SFHA, you will need a permit from the town before beginning any development projects. *Development includes the construction of buildings and other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, and the storage of equipment or materials.* Substantial improvements to existing structures where the cost of improvement exceeds 50% of the value of the structure also require a flood hazard permit. Even if your town doesn't have zoning, a permit and subsequent flood hazard review are required for development in a SFHA. You should contact your local zoning or floodplain management official to inquire about the permitting process.

After submission of the permit to the town, the application is given to the Agency of Natural Resources to provide technical comments for ensuring NFIP compliance. Your complete permit should include a thorough description of all proposed development with the SFHA. You should also provide a comprehensive site plan showing existing and proposed contours and elevations (in the same datum as the effective NFIP map), the location of proposed fill, floodway and/or flood fringe delineation, and the proposed lowest floor elevation (including basement) for any residential structure (and/or floodproofing elevation for any commercial structure).

### **My bank/mortgage company claims that I need to buy flood insurance, but I don't think that I'm in the floodplain. What can I do?**

Flood insurance is required for structures within SFHAs to protect federal financial investments (like mortgages and other federally-backed loans). If you are being required to purchase flood insurance but don't think you are in a SFHA, there are a few possible scenarios for this situation:

**- The structure is located in the mapped SFHA, but the map is incorrect.**

FEMA maps may sometimes overlook local topography. For example, if your structure is on the mapped floodplain, but it sits on a knoll high above the river, you may be able to apply to FEMA to get your structure removed from the floodplain. You will need to complete a Letter of Map Amendment (LOMA) application showing that the elevation of the ground surface at the lowest end of your structure (Lowest Adjacent Grade or LAG) is above that of the base flood elevation (BFE; the elevation that the water of the 100-year flood will reach in the event of a base flood). Once this is completed, you will no longer be required to purchase flood insurance. For cases where the FEMA-issued flood map is incorrect, fill out the [MT-EZ](#) (pdf, 125kb) form (single family residential) or [MT-1](#) (pdf, 3.2mb) form (commercial or multi-family structure) form. The forms are also available from your Town office or the State Floodplain Management office (802-241-3759; [ANR.Floodplains@state.vt.us](mailto:ANR.Floodplains@state.vt.us)).

Although there is no fee associated with a LOMA (since FEMA made the map error), you will need to hire a licensed surveyor or engineer to fill out the Elevation Form on the LOMA application. Please be aware that the survey may show that the LAG of the structure is located below the BFE, in which case the structure would not be able to be removed from the Special Flood Hazard Area.

**- The structure is in the mapped SFHA, but it has been elevated on fill so that it is above the BFE (and thus, out of the SFHA).**

By elevating your structure to or above the BFE, you are effectively removing yourself from the floodplain. You can file a Letter of Map Revision Based on Fill (LOMR-F) to eliminate the mandatory flood insurance purchase requirement. Please be aware that placement of fill is not allowed within the regulatory floodway, and that your community needs to issue a permit for the placement of fill within a SFHA. The placement of fill in the floodplain also has the potential to increase flood risk and damage throughout the community. The Town must send the permit application for placement of fill and all related materials to the Agency of Natural Resources for a 30-day comment and review period before issuance of a permit.

Like a LOMA, a LOMR-F requires the help of a licensed surveyor or engineer. Unlike a LOMA, a LOMR-F is not free and requires a flat fee. For a LOMR-F, fill out the [MT-1 form](#) (pdf, 3.2mb). The LOMR-F also requires a signature from a community official assuring that all minimum NFIP requirements have been met and all proposed and existing structures will be reasonably safe from flooding. Just because the property has been removed from the floodplain on paper doesn't mean that it is safe from rising floodwaters. Installing a basement below the BFE on a lot that has been elevated on fill, for example, poses a risk to both the structural integrity of the house and the property surrounding it.

**- A portion of the tax parcel is in the SFHA, but the structure is not.**

Mortgage companies often hire third party contractors (determinations companies) to assess whether a structure is in the SFHA. These companies often may only tax parcel maps when they make their floodplain determinations. If a portion of your tax parcel is in the floodplain, regardless of where your structure is located, they may consider your house to be located in the SFHA. To correct this mistake, you must provide information to your bank or insurance company that shows that your home is out of the SFHA. A Letter of Map Amendment (LOMA) or Letter of Map Revision Based on Fill (LOMR-F) may be required as proof that your structure is located out of the floodplain.

## **Where can I get more information about floodplain management and NFIP regulations?**

For additional information on floodplain management or NFIP regulations, you can contact the Floodplain Management Office at the Agency of Natural Resources. We can be reached by phone (802-241-3759) or email ([ANR.Floodplains@state.vt.us](mailto:ANR.Floodplains@state.vt.us)). You can also visit our web site at [www.vtwaterquality.org/rivers/htm/rv\\_floodhazard.htm](http://www.vtwaterquality.org/rivers/htm/rv_floodhazard.htm).

Our website provides links to a number of resources to help understand the NFIP maps and regulations, and provide technical guidance for flood protection in or near SFHAs. These include [FEMA publications](#), [Technical Bulletins](#), and [LOMA forms](#).