

# Floodplain Management Terms and Resources

## FLOODPLAIN MANAGEMENT

Floodplain management is a community-based effort to prevent or reduce the risk of flooding, resulting in a more resilient community. Local community officials play a critical role in making their communities safer and more resilient by working to identify flood risk and then acting to reduce risk.

While the Federal Emergency Management Agency (FEMA) has minimum floodplain management standards for communities participating in the National Flood Insurance Program (NFIP), adopting higher standards will lead to safer, stronger, more resilient communities. Joining the NFIP is a step towards reducing a community's risk of flooding and allows for speedier, more sustained recovery. It also allows property owners to purchase flood insurance and receive disaster assistance for flood-related damages.

## NATIONAL FLOOD INSURANCE PROGRAM (NFIP) MAPPING TERMS

The following information is an introduction to basic floodplain management terminology. In cooperation with FEMA, New York State developed the Floodplain Mapping Program to aid FEMA's Flood Hazard Mapping.

**Flood Insurance Rate Map (FIRM):** Government-provided flood map that delineates different floodplains with different zone designations for floodplain regulation purposes. Also used by different levels of government and first responders. (Note: These maps were previously used for insurance rating purposes but that is no longer true since October 1, 2021 with the rollout of Risk Rating 2.0). A FIRM includes Special Flood Hazard Areas (SFHAs) and Base Flood Elevations (BFEs).

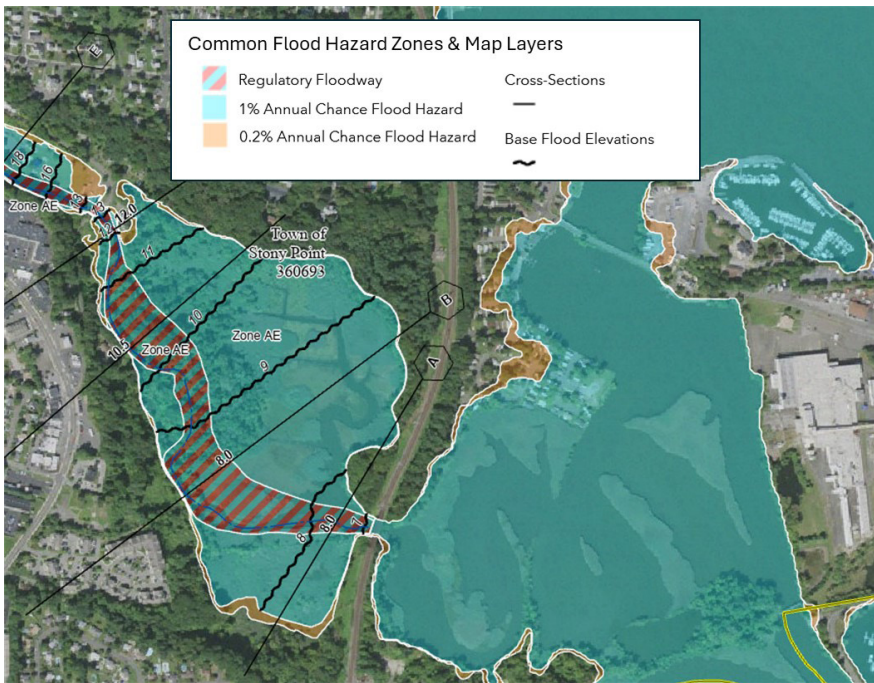
**The FEMA Flood Map Service Center** is the official public source for flood hazard information produced in support of the NFIP. Here you can find and download official flood maps and other flood hazard products such as the National Flood Hazard Layer (NFHL) data.

**Access it here:** <https://msc.fema.gov/portal/home>

**A Flood Insurance Study (FIS)** is a compilation of engineering and survey data that produces the FIRM and a report through a floodway analysis which delineates the location of the floodway and the flood fringe (see below). Note there are differences between riverine, pluvial, and coastal flood studies.



*Flooding in Esopus on December 25, 2020.  
Credit: Angela Schimizzi*



**National Flood Insurance Rate Map (FIRM):** Image of a Flood Insurance Rate Map from Stony Point, NY. Stony Point is bordered by the Hudson River estuary to the north and east. A small tributary enters a tidal marsh from the west. NFIP's floodplain management requirements are enforced in the Special Flood Hazard Area (SFHA) or 1% Annual Chance Flood Zone, shown in shaded blue.

### 1% Annual Chance Flood Zone

Also known as

- Special Flood Hazard Area (SFHA)
- Zone AE or A (Zone VE or V for coastal areas)

The area in which NFIP's floodplain management requirements must be enforced for participating communities and where the mandatory flood insurance purchase requirement applies. It represents the land area covered by the regulatory floodway and the base flood (or 1% Annual Chance Flood Hazard), which typically has special flood or flood-related erosion hazards.

#### > Base Flood

This engineering calculation is based on the probability that the flood has a 1% chance of occurring each year, but it could happen any year. Sometimes referred to as the "100-year flood," however this is misleading in that many people assume it is only possible that it would occur once every 100 years.

#### > Base Flood Elevation (BFE)

The computed elevation to which floodwater is anticipated to rise during the base flood. Any type of floodproofing or mitigation measures should consider the BFE.

### 0.2% Annual Chance Flood Zone

Represents specific land area outside of the SFHA, designated an area of moderate risk. This engineering calculation is based on the probability that the flood has a 0.2% chance of occurring each year, but it could happen any year. Sometimes referred to as the "500-year flood," however this is misleading in that many people assume it is only possible that it would occur once every 500 years.

### Regulatory Floodway

Often, but not always, the deepest and swiftest part of the floodplain and new construction is typically not allowed unless it follows extremely strict regulatory standards.

#### Climate change

FEMA FIRMs do not consider climate change. Flood risk is increasing in frequency and severity because of bigger storms and rising seas. Other tools are needed alongside FIRMs to understand and communicate flood risk.

#### Flood Risk outside of SFHA

More than 25% of NFIP claims in New York State occur outside the SFHA, and that number is projected to increase with climate change.

#### What are the odds? 30-Year Mortgage

If you purchased a 30-year mortgage for a home in the SFHA, the probability of a base flood occurring during that time is 26%. A base flood could occur multiple times within 30 years, or not at all.

#### Elevate above BFE

Flood insurance for a house built two or more feet above the base flood elevation will cost significantly less than a house built to the base flood elevation.

## NFIP FLOODPLAIN ADMINISTRATION

Most communities in New York have adopted the minimum NFIP standards, plus the New York State Building Code requirement to add two feet to the mapped flood elevation. In many cases, adopting higher standards will lead to safer, stronger, more resilient communities. Although it is a federal program, the NFIP is implemented at the local level.

A local designated Floodplain Administrator is responsible for enforcing floodplain management ordinances and granting or denying permits. The appointed municipal employee serving this role can vary by community. Most are code enforcement officers, but it can also be the chief building inspector, the commissioner of planning and development, or the municipal engineer. County officials can also be designated as the Floodplain Administrator for a municipality through a Memorandum of Understanding. Each municipality designates their local administrator when adopting their floodplain management ordinance – usually the Flood Damage Prevention Law. Check your floodplain management ordinance for the role and responsibilities of the Floodplain Administrator in your municipality. Floodplain Administrators can also play a role in recommending the adoption of higher standards.

**Learn about the NFIP floodplain management ordinances here:**

Code of Federal Regulations, 44 CFR Part 59: [bit.ly/44CFRPart59](https://www.ecfr.gov/current/title-44-chapter-59)

Code of Federal Regulations, 44 CFR Part 60: [bit.ly/44CFRPart60](https://www.ecfr.gov/current/title-44-chapter-60)

## TRAINING AND RESOURCES FOR FLOODPLAIN ADMINISTRATORS



*Raised homes in Stony Point, NY.  
Credit: Libby Zemaitis*

**The New York State Department of Environmental Conservation (DEC)** is the state's National Flood Insurance Program coordinating agency. Local officials, developers, and the public may contact the DEC for technical assistance and guidance in all matters associated with the NFIP. In addition to providing technical assistance, the DEC also provides training and workshops for community officials, including Floodplain Administrators, on all aspects of the NFIP. NYS DEC Floodplain Management:

[bit.ly/NYSDECfloodplainMngmnt](https://www.dec.state.ny.us/dec/floodplain/)

### **New York State Floodplain and Stormwater Managers Association (NYSFSMA)**

NYSFSMA is the state chapter of the Association of State Floodplain Managers (ASFPM). Founded in 2000, NYSFSMA brings together New York State professionals to foster awareness, information exchange, and cooperation in the floodplain and stormwater management fields. A library of training and resources can be accessed on the NYSFSMA website: <https://nyfloods.org/>

### **Association of State Floodplain Managers (ASFPM)**

Founded in 1977, the Association of State Floodplain Managers is a 501(c)(3) scientific and educational nonprofit organization dedicated to reducing flood loss in the nation. Website: <https://www.floods.org/>

- **NFIP 101 - Introduction to Floodplain Management:** The ASFPM, in partnership with FEMA, created a free, online training course that can serve as a technical resource for floodplain management professionals. The 23-hour course contains information that can be beneficial to floodplain administrators in the implementation of the NFIP. Completing the course can also allow for 12 continuing education credits for Certified Floodplain Manager (CFM): [bit.ly/ASFPMNFIP101](https://www.floods.org/nfip101/)
- **Certified Floodplain Manager (CFM) Certification Program:** The ASFPM national certified floodplain manager program was established in 1998 to create a baseline testing of professional competence in floodplain management. The program requires passing an exam and then continuing education credits annually to maintain certification: [bit.ly/ASFPMCFM](https://www.floods.org/cfm/)

## KEY RESOURCES

### FEMA & NFIP

- FEMA Map Service Center  
<https://msc.fema.gov/portal/home>
- Community Rating System  
<https://www.fema.gov/floodplain-management/community-rating-system>

### State Guidance

- Floodplain Management (NYS DEC) webpage: [bit.ly/NYSDECfloodplainMngmnt](https://bit.ly/NYSDECfloodplainMngmnt)
- Floodplain Management in New York State Quick Guide (NYS DEC, 2023):  
[bit.ly/NYSDECfpmQuickGuide](https://bit.ly/NYSDECfpmQuickGuide)

### State Guidance for Implementation of the Community Risk and Resiliency Act

- NYS Flood Risk Management Guidance (NYS DEC): [bit.ly/NYSDECCRRAFloodRiskMgmtGdnc](https://bit.ly/NYSDECCRRAFloodRiskMgmtGdnc)
- Estimating Guideline Elevations: [bit.ly/NYSDECCRRAEstGuidelineElevations](https://bit.ly/NYSDECCRRAEstGuidelineElevations)

### For Elected Officials

- Understanding and Managing Flood Risk: A Guide for Elected Officials (ASFPM):  
[bit.ly/ASFPMFloodRiskGuideElectedOfficials](https://bit.ly/ASFPMFloodRiskGuideElectedOfficials)
- No Adverse Impact Toolkit (ASFPM): [bit.ly/ASFPMNoAdverseImpactToolkit](https://bit.ly/ASFPMNoAdverseImpactToolkit)



*A natural floodplain that is also used for recreation along the confluence of Kaaterskill and Catskill Creeks at Mawignack Preserve, Greene County.  
Credit: Jessica Kuonen*

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**Jessica Kuonen**

Hudson Estuary Resilience Specialist

[jak546@cornell.edu](mailto:jak546@cornell.edu)



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