

# StreamGuide

NO. 4

## Flood Emergency Preparedness Guide

### Why Prepare for a Flood?

Knowing what to do quickly during floods and other natural disasters and having a plan and supplies ready can make the difference between safety and life-threatening situations. Having a plan can make you feel safer and more confident during an event such as a natural disaster. For example, having a common plan to find family members during a flood can be very reassuring.

Natural disasters disrupt hundreds of thousands of lives every year, with long term effects on both people and property. Floods are the nation's most common natural disaster and result in more deaths than any other natural disaster.

Flood hazards can impact you no matter where you live, but be especially aware if you live in a low-lying area, near water or downstream from a dam. Even very small creeks, gullies, culverts, dry streambeds,



*Flooding in Mount Tremper following Tropical Storm Irene (August 2011).*

or low-lying ground that appears harmless in dry weather can flood.

If a disaster occurs in your community, local government and disaster-relief organizations will try to help you, but you need to be prepared to act. Local responders may not be able to reach you

right away, or they may need to prioritize other emergencies.

You should be ready to be self-sufficient for at least three days. This may mean providing your own shelter, first aid, food, water, and sanitation. 💧



ASHOKAN WATERSHED  
STREAM MANAGEMENT  
PROGRAM

### Flood Emergency Preparedness Guide:

- 💧 Why Prepare for a Flood?
- 💧 Difference Between a Flood and Flash Flood
- 💧 Turn Around—Don't Drown!
- 💧 How Do I Prepare My Family for a Flood?
- 💧 What Is The 100-Year Flood?
- 💧 How Do I Prevent Flood Damage to My Property?
- 💧 When Flooding Occurs
- 💧 Returning Home After a Flood
- 💧 Additional Resources

*This StreamGuide was produced by Cornell Cooperative Extension of Ulster County in collaboration with Ulster County Soil & Water Conservation District.*

### What's the Difference Between a Flood and a Flash Flood?

**Flood:** When waterways such as rivers or streams overflow their banks as a result of rainwater or a rain-on-snow melt event. They usually develop slowly which allows time for preparation and evacuation. Floods are one of the most common hazards in the United States.

**Flash Flood:** Characterized by a rapid stream rise with depths of water that can reach well above the streambanks. They often develop quickly with little prior warning and are common in mountainous settings (like many areas in the Ashokan Watershed).

**Flash floods are the #1 weather-related killer in the United States.**

**Flood Watch** or **Flash Flood Watch:** Indicates flooding or flash flooding is possible within the designated watch area. When a watch is issued, be alert and ready to take action.

**Flood Warning** or **Flash Flood Warning:** Flooding or flash flooding has been reported or is imminent. You should take necessary precautions (such as moving to higher ground) at once.

## Turn Around—Don't Drown!

The Centers for Disease Control report that over half of flood-related drownings occur when a vehicle is driven into hazardous flood waters followed by walking into or near floodwaters. Most people do not know the awesome power of water. Only six inches of moving water can knock over a standing adult. It only takes two feet of moving water to carry away most vehicles including sport utility vehicles (SUV's) and pickup trucks. To stay safe remember to follow these important rules:

- Avoid areas already flooded, especially if the water is flowing fast. Do not attempt to cross flowing streams.
- Road beds may be washed out under flood waters. NEVER drive through flooded roadways.
- Be especially cautious at night when it is harder to recognize flood dangers.
- Obey all signs. If it says the road is closed ahead, do not attempt to cross the barrier.
- Watch for washed-out roads, mud-slides, broken water or sewer mains, downed electrical wires and fallen objects.
- If you are in your car and the water begins to rapidly rise around you, abandon your vehicle immediately and seek higher ground.
- Have a portable radio, flashlights, extra batteries and emergency cooking equipment.
- Keep your automobile fueled as you may not be able to reach a gas station for a number of days. Also consider keeping emergency supplies in the trunk of your vehicle.
- Determine how many feet your property is above or below flood levels.
- Keep materials like sandbags, plywood, plastic sheeting, and lumber handy for emergency water proofing.
- Plan what you will do with your pets during an emergency. Not all shelters allow animals.
- Stockpile emergency supplies of canned food, medicine, first aid supplies, and drinking water. Store drinking water in clean, closed containers.
- For more information on building a disaster preparedness kit please visit the FEMA website at [www.ready.gov/build-a-kit](http://www.ready.gov/build-a-kit)



*Vehicles moved by floodwaters along Route 28 near Mount Tremper during Tropical Storm Irene.*

## How Do I Prepare My Family for a Flood?

- There are a variety of things you can do to prepare yourself and your family in the event of a flood.
- Learn the safest route from your home or business to high, safe ground should you have to leave in a hurry.
- Develop and practice a "family escape" plan and identify a meeting place if family members become separated.
- Have a portable radio, flashlights, extra batteries and emergency cooking equipment.
- Keep your automobile fueled as you may not be able to reach a gas station for a number of days. Also consider keeping emergency supplies in the trunk of your vehicle.
- Determine how many feet your property is above or below flood levels.
- Keep materials like sandbags, plywood, plastic sheeting, and lumber handy for emergency water proofing.
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## What is the 100-Year Flood?

When discussing floods you will probably hear the term "100-year flood." Often people mistakenly think this means a 100-year flood will only occur once every 100 years. This is not the case.

The 100-year flood refers to the chance that a specific flood might occur once every century. That is, there is a 1 in 100 (or 1%) chance that the flood could occur in any given year. Since this is about probability, these floods can occur more frequently than once every 100 years (and seemingly often do). The statistical flood is based on stream gage flood records for an area.

As the record grows the statistics change. What was an assumed 100-year flood for the Esopus Creek 20 years ago has changed given the flood record of the last 20 years. In fact, our "100-year floods" are getting bigger—something we need to account for in our preparedness! A better term to use (and the one used by floodplain managers) is "1% annual chance flood."



## Flood Emergency Preparedness Guide

### How Do I Prevent Flood Damage to My Property?

It would be wise to check and see if your property is located within the 100-year floodplain. You can find this information by contacting your Town Building Inspector or Code Enforcement Officer, your mortgage holder, or FEMA. If you find that you are in the 100-year floodplain you should seriously consider purchasing flood insurance. For more information on the National Flood Insurance Program (NFIP) please visit their website at: [www.fema.gov/business/nfip/](http://www.fema.gov/business/nfip/). You should also consider:

- Making a list of all valuables including furnishings, clothing, and other personal property. Keep the list in a safe place.
- Avoid building in a floodplain unless you elevate or reinforce your home.
- Elevating the furnace, water heater, electrical panel, and other utilities in your home if you live in an area that has a high flood risk.
- Installing “check valves” to prevent flood water from backing up drains in your home.
- Sealing walls in basements with waterproofing compounds to avoid seepage.
- Installing stormwater management systems around your buildings and keeping the ground sloped away from your home.

### When Flooding Occurs

If a flood is likely in your area, you should:

- Monitor the National Oceanic & Atmospheric Administration’s (NOAA) Weather Radio or your local radio or television station for information.
- Be aware that flash flooding can occur. If you know or suspect that your

### NY-Alert

Consider signing up for NY-Alert.

By signing up for NY-Alert, you can receive warnings and emergency information via the web, your cell phone, email and other technologies. Signing up for NY-Alert is free. Your information is protected and never shared with any one else. You can modify what type of information you receive or unsubscribe at any time. NY-Alert is a tool to provide you with critical information when you may need it the most.

Information sent by NY-Alert includes severe weather warnings, significant highway closures, hazardous materials spills, and many other emergency conditions. Additionally you will find information regarding response actions being taken by local and state agencies and protective actions that you should take to protect you, your family and your property.

To sign up for NY-Alert please visit their website at <https://users.nyalert.gov/>



*The Bridge Street bridge in Phoenicia being overtopped by floodwaters as a result of Tropical Storm Irene.*

area is susceptible to flash flooding do not wait for an evacuation order. Move to higher ground immediately.

- If you have the time, secure your home by bringing in outdoor furniture and move essentials and valuables to the upper floors.
- Turn off utilities at the main switches or valves if instructed to do so. Disconnect all electrical appliances. Do not touch electrical equipment if you are wet or in standing water.
- Drain your plumbing if it is likely that the temperature in your house will drop below freezing. Shut off the water service valve. Then turn on the highest and lowest hot and cold water taps in the house to drain your system. Flush toilets and remove water from the lower bowl to prevent freezing damage. Leave all taps open until you return.
- Be sure to lock all doors and windows before you leave.

## Flood Emergency Preparedness Guide

### Additional Resources

A number of publications can be found on the FEMA online library that are useful in preparing for and recovering from a flood. They include:

"After a Flood: The First Steps" [L-235]

"Homeowner's Guide to Retrofitting: Six Ways to Protect Your House from Flooding" [FEMA-312]

"About the Flood: Elevating Your Floodprone House" [FEMA-347]

"Protecting Building Utilities From Flood Damage" [FEMA-348]

All these and more can be found at the FEMA library online at:  
[www.fema.gov/library/index](http://www.fema.gov/library/index)  
or at [www.ready.gov/floods](http://www.ready.gov/floods)

### Returning Home After a Flood

Even after the high waters subside, there can still be dangers that you have to look out for. Do not attempt to return to your home until authorities say that it is safe to. Even when it has been deemed safe use caution when traveling the roadways since they may be damaged or have downed power lines across them.

**Remember Safety First!** If you have any doubts about the structural integrity of your home have a qualified building inspector or structural engineer inspect it first.

#### Upon Entering Your Home and During Clean-Up

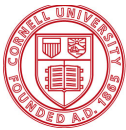
- Check to see if there are any gas leaks. If there are, leave and contact the gas company for further assistance.
- Do not turn on any electrical appliance until a licensed electrician has checked your electrical system.
- Be sure to wear rubber boots, gloves, safety glasses and other protective gear when inspecting or cleaning up your home.
- Throw out any food or medicine that has come into contact with flood waters.
- Test your water for potability. Boil for 10 minutes if you are unsure if it is contaminated.
- Take precautions to prevent mold growth which can cause disease and allergies. Remove all standing water and wet materials (such as carpets) and ventilate with fans and dehumidifiers. If mold has already begun to grow, consult a professional. Avoid mixing household cleaners as some combinations can produce toxic fumes.
- Stay physically healthy by getting plenty of rest and eating well. Do not be afraid to ask for help with any emotional stresses that may develop. Organizations such as the Red Cross or similar group can give you more information about mental health services in your area. 💧



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