

# Mitigation for Homeowners

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Mitigation is an action to reduce the loss of life and property by lessening the impact of disasters. Mitigation can keep natural hazards, like flooding and hurricanes, from having catastrophic impacts.

## Options for Homeowners

Mitigation reduces a property's risk to future events. It can allow residents to return more quickly to a home with less damage. While it usually takes an initial investment, mitigation pays off in the long run. On average, every \$1 spent on mitigation saves \$6 in future losses. You may have a wide range of options for protecting your home from flood and wind events through mitigation. Be sure to consult a licensed contractor and the local building department before making any structural changes. This will help you understand the requirements and get any necessary permits.

### Before You Mitigate, Know Your Risk

Before you act to protect your property, you need to know its risks. Your local floodplain manager and emergency manager can inform you about the wind and water hazards possible in your community. Also, flood mitigation projects are usually measured against the Base Flood Elevation (BFE) for your area. The BFE is the level water is expected to reach during a flood event that has a one-in-100 chance of occurring in any given year. The BFE is shown on the Flood Insurance Rate Map and in the Flood Insurance Study. To find your BFE, talk to your floodplain manager.

## Flood Mitigation Options



- Anywhere it rains, it can flood. Protect your investment in your home by getting flood insurance, even if you do not live in a high-risk flood zone.
- Elevate your home. Raise its lowest floor above the BFE. This can lower your flood insurance premiums, as well as reducing the risk from future floods.
- Elevate or floodproof HVAC and mechanical units, ductwork, electrical systems, and other utilities above the BFE. This can protect them from flood damage and reduce the cost of repairs.
- Install flood vents in foundation walls, garages, and other enclosed areas. Flood vents reduce flood damage by allowing water to flow through and drain out.
- Use flood-resistant materials in areas of your home below the BFE. For example, replace carpeting with tiles or use flood-resistant insulation and gypsum wallboard (Sheetrock). This can prevent major water damage.
- Anchor any fuel tanks to the floor. Make sure the vents and fill line openings are above the BFE. (This may require approval from your fuel provider.) Fuel tanks can tip over or float, spilling fuel and becoming a fire hazard.
- Install a backflow valve on your sewer system to prevent sewage back-up in your home.
- Add a waterproof veneer to exterior walls to prevent damage from shallow flooding. Seal your basement walls with waterproofing compounds.

## Wind Mitigation Options

- Add hurricane shutters to protect the windows and glass doors.
- Add bracings to reinforce a gable end roof. It is more susceptible to high wind than other roof types.
- Consider fastening the roof to the walls with hurricane straps.
- Reinforce garage doors and double-entry doors to prevent failure from wind pressure. Reinforce garage doors with girts and by strengthening the glider wheel tracks. Add a heavy-duty dead bolt to double-entry doors. Slide bolts on one of the doors and longer hinge attachments on the door and frame can also help.
- Maintain your property. Anything can become a windborne missile--from a loose shingle to a tree. The distance between your home and any tree should be greater than a full-grown tree's height.

## General Protective Measures



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- Mitigation reduces or eliminates future losses. However, you should also consider other measures to protect your family, your valuables, and your peace of mind.
- Have a go-kit and make an emergency plan. Instructions and templates are available from [Ready.gov](https://www.ready.gov). Familiarize yourself with local emergency and evacuation plans.
- Consider buying a generator for your home that automatically turns on when the power goes out. Place it above the BFE.
- Store important documents and sentimental items like photographs above the BFE (preferably on an upper floor). Copy important printed photos, and store them in more than one location.

## Mitigation Requirements for Homeowners

If local officials find your home to be substantially or repetitively damaged by floods, you may be required to make it comply with the latest local floodplain management ordinance. You may receive up to \$30,000 to do this if you have a National Flood Insurance Program flood insurance policy. This has Increased Cost of Compliance (ICC) coverage. For eligible policyholders, ICC provides financial assistance to offset the costs to mitigate the structure's risk. For more information, talk to your insurance agent.

### Interested in Learning More About How to Mitigate Risk?

FEMA produces mitigation guidance for communities, businesses, and homeowners, including:

- [Building Science Resource Library](#)
- [Protect Your Property from Flooding](#)
- [Homeowner's Guide to Retrofitting](#)

FEMA also provides grant funds for certain kinds of mitigation projects under the [Hazard Mitigation Assistance](#) Program. This funding must be accessed through the local government. Contact your local emergency management agency for more information.

