

County of Santa Barbara

# Homeowners Guide for **Flood Prevention** and **Response**



# Santa Barbara County is no stranger to flooding events

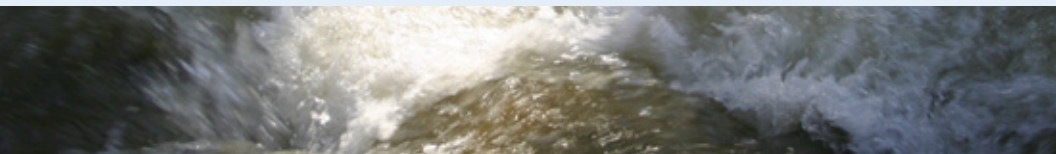
**Santa Barbara County** has suffered impacts from several floods throughout the years. These flood events can cause serious damages to public property, infrastructure and private property.

While the County and other agencies work hard to prepare for the winter, flooding can still happen. Residents and business owners should take some time while the sun is still out to evaluate the need for flood insurance, permanent drainage improvements on their property, and last-minute emergency actions such as sand bags and timber deflectors.

Fires in our watersheds can amplify the need to prepare, and prepare early. Fires have impacted watersheds in our County for decades. A burned watershed creates a new dynamic that should heighten everyone's awareness. While in many cases, flooding occurs from sustained rainfall over days that triggers flood flows, a burned watershed can yield the same result, or worse, with a single rainfall that would otherwise not even cause runoff.

Even if you never experienced a major flood, you ought to know what to do if flood waters threaten your community. While some years have an increased risk, say after wild fires, or El Nino predictions, any given year can produce flooding that can impact you and your family. Like the County Flood Control District, you should prepare every year for the potential of flooding.

For more information, see the County of Santa Barbara's website at [www.countyofsb.org](http://www.countyofsb.org)



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# Myths

# &

# Facts

## Myth

A 100-year flood occurs only once every 100 years.

## Myth

Flash floods mainly occur in the eastern United States.

## Myth

Flash floods occur only along flowing streams.

## Myth

Flash floods occur mainly in the late afternoon and evening.

## Myth

Homeowners insurance policies cover flooding.

## Myth

You can't buy flood insurance if your property has been flooded.

## Myth

Larger vehicles, such as SUVs and pickups, are safe to drive through flood waters.

## Fact

The 100-year flood is a climactic average; there is a 1% chance that a 100-year flood will occur in any given year.

## Fact

Flash floods occur in all 50 states, including Alaska and Hawaii.

## Fact

Flash floods can occur in dry arroyos and urban areas where no streams are present.

## Fact

Many flash floods occur at night.

## Fact

Unfortunately, many homeowners do not find out until it is too late that their policies do not cover flooding. Contact your insurance company or agent to buy flood insurance.

## Fact

You are still eligible to purchase flood insurance after your home, apartment, or business has been flooded, provided your community is participating in the National Flood Insurance Program.

## Fact

Two feet of rushing water can carry away most vehicles including SUVs and pickups.

# SECTION 1

## Before the Flood: Flood Prevention Strategies



### A. Evaluating Your Property

Know your property: identify changes in slope and grade that influence where water and debris flow and collect. Know the over-land escape routes for water/debris, and plan diversions accordingly. Consider low spots and high flow areas when planning for structure and property protection. Also consider escape routes for water and be sure that your efforts to protect your own property do not result in diverting water to a neighbor's property where it could cause damage there. See Figures 1 and 2 for drawings depicting protected and unprotected properties.

### B. Property Flood Proofing: Drainage Improvements

Know your property: identify changes in slope and grade that influence where water and debris flow and collect. Know the over-land escape routes for water/debris, and plan diversions accordingly. Consider low spots and high flow areas when planning for structure and property protection. Also consider escape routes for water and be sure that your efforts to protect your own property do not result in diverting water to a neighbor's property where it could cause damage there. See Figures 1 and 2 for drawings depicting protected and unprotected properties.

# Unprotected Homes



Figure 1: Unprotected Homes – A typical configuration of a home at risk.

# Protected Homes

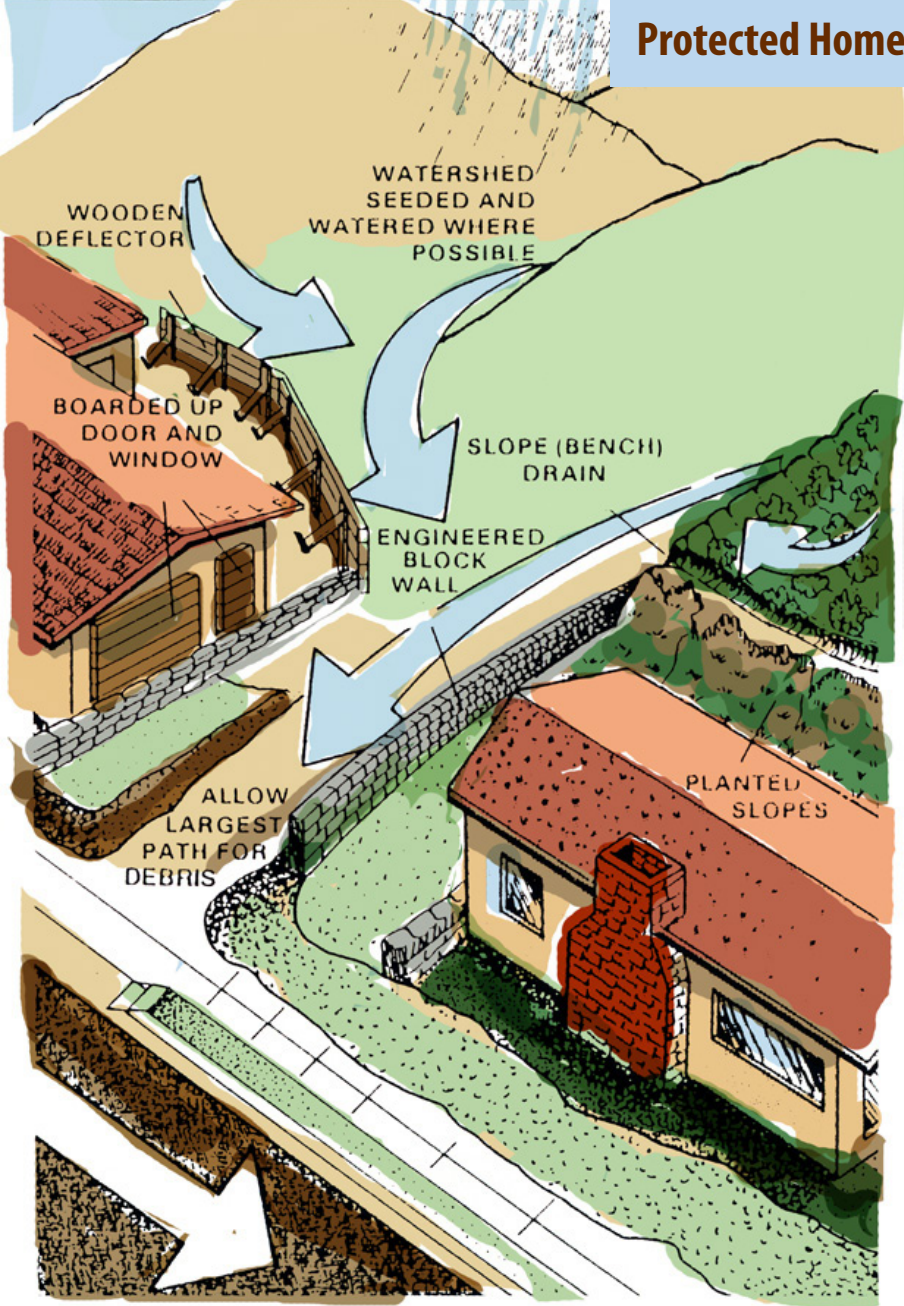


Figure 2: Protected Homes – A home with various protection features in place.

# Slope (Drain) Bench

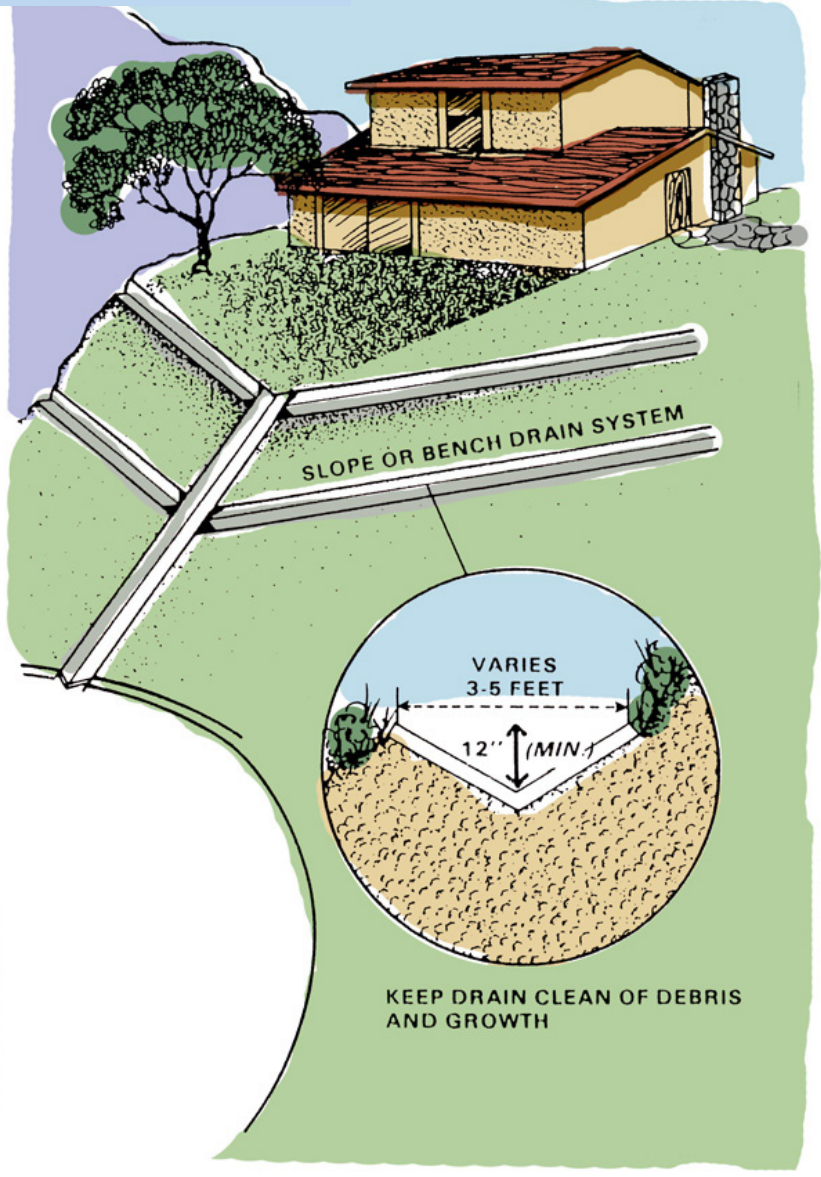


Figure 4: Slope (Bench) Drain – A typical bench drain system in hillside applications.



## Property Drainage

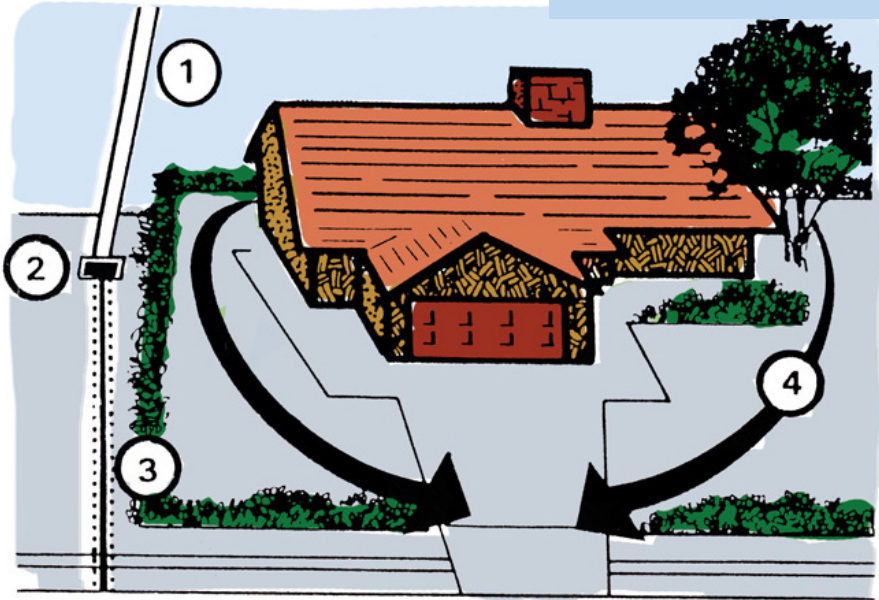


Figure 5: Property Drainage – A home with typical single lot drainage features.

### Property Drainage

**1.** Paved terrace drains may extend over several lots, but it is each owner's responsibility to maintain that portion which is on his property. Keep drainage devices clean.

**2.** Grates and basins should be kept free of silt and debris. Make periodic checks to be sure the grate and outlet pipes are not clogged.

**3 and 4.** Earth berms prevent water from flowing over slopes. It is important that these berms be maintained. Side swales direct water around the house. Keep flow line at least 24 inches from the building wall.

In hillside areas, poorly maintained drainage devices (including slope or bench drains) are the source of many flooding problems. Maintenance of these drains is the responsibility of the homeowner with few exceptions. *Keep these drains clear of debris and overgrowth.* Blocking may cause undermining and structural failure of the drains or erosion of the hillside. **See Figure 4.**

A primary design consideration is the location of overland escape routes for water on your property leading to streets or gutters. It is important that your drainage system not overload those escape routes.

Once you have designed and installed a drainage system, be sure that you maintain it and check it periodically during the rainy season to identify and correct problem areas such as leaves clogging a drain or sump. **See Figures 4 and 5** for drawings illustrating drainage improvements.

## **C. Preparing Your Property for Water and Debris Flows**

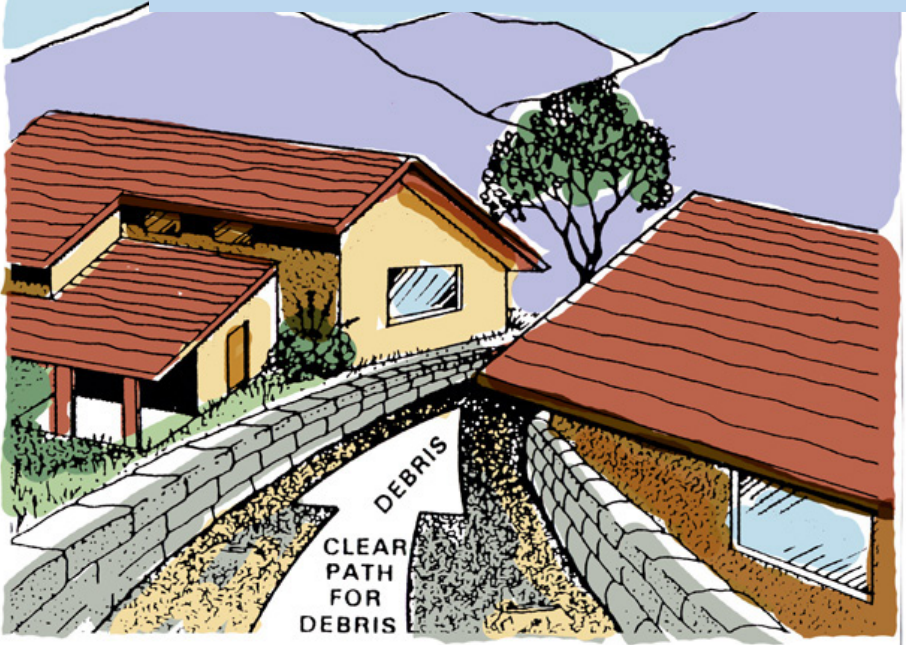
During a flood, your property can be damaged by water, debris (mud, rocks, branches, etc.) or both. You need to be prepared for the possibility that both could occur. Many of the prevention strategies are the same. The following section emphasizes preparing for debris flows. The section on flood-proofing structures focuses on keeping water out of homes and other structures.

### **Debris**

Don't underestimate the potential power of debris flows. Begin planning and installation of debris control facilities before the storm season. Start as soon as possible. Protection facilities are not always pleasing to the eye but appearance should not dictate location or type of installations.

Be prepared to personally observe and maintain your installations during storm periods, for in many cases a minor correction will prevent major failure. However, do not take any unnecessary risks.

## Directing Debris Flows Between Buildings



*Figure 6: Directing Debris Flows Between Buildings – How to channel debris through and away from buildings.*

Should your debris control problems appear to warrant facilities in excess of the type described in this pamphlet; it is recommended that you consult a competent expert such as a civil or geotechnical engineer or landscape architect for additional advice.

### **Do-it-yourself debris control aids:**

There are a variety of inexpensive ways to control debris flow on your property during a storm. **See Figures 6, 7 and 8** for drawings depicting debris flow and control. When compared to the protection received, they are well worth the time and money to install them. Most of the following items can be installed with normal household tools and consist of materials readily available at your local lumber yard. They include lumber, sandbags, sand, and plywood.

## Directing Debris Flows

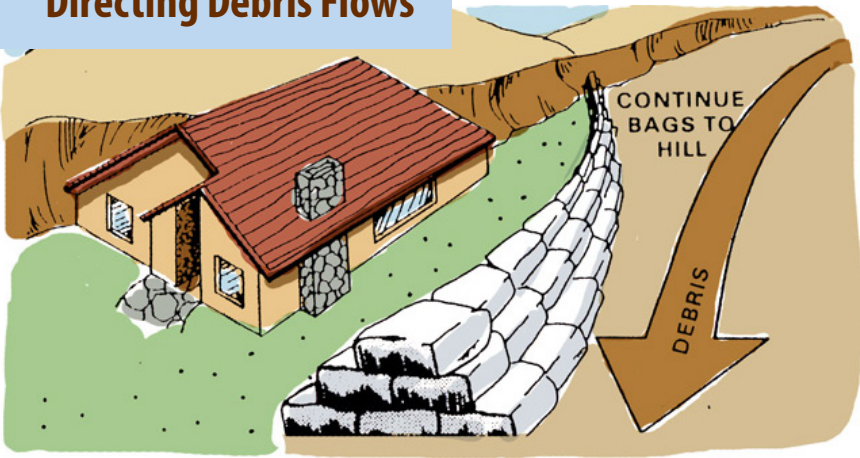


Figure 7: Directing Debris Flows – The use of a sandbag wall to deflect debris away from structures.

## Protected Homes

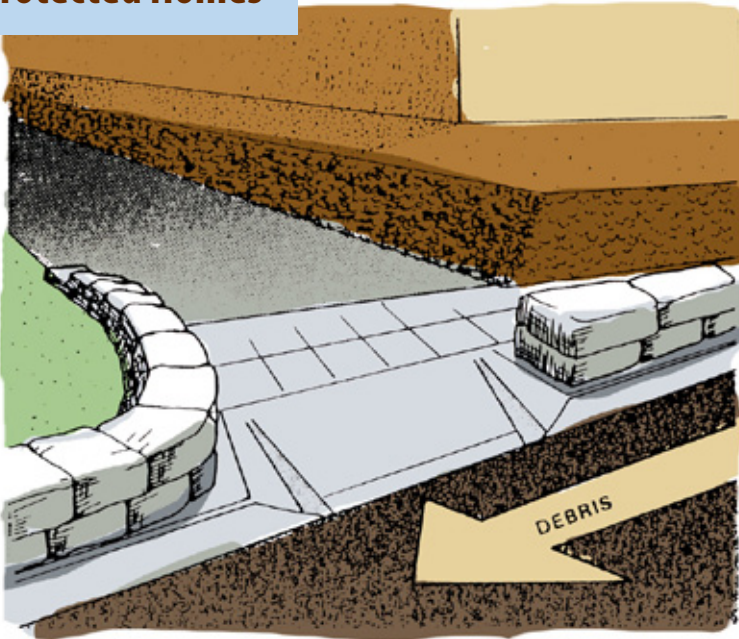


Figure 8: Controlling Debris – Directing debris flows away from homes and allowing entry of debris from other sources.

## General rules for debris flow control:

Each situation differs, however, basic rules can be followed in all cases involving debris movement.

- Never underestimate the power of any debris flow.
- Try to direct debris flows away from improvements.
- Clear a path for the debris.
- Always place protection to deflect debris, not to dam it.
- Use your house or building as a deflector if necessary.
- Avoid trying to confine the flows more than is absolutely required.
- Debris can enter a building through windows - consider boarding up windows that might be in the path of debris, such as a side of a structure next to a steep slope.
- Remember to protect your home first. Then consider what time and money are available to protect other less valuable objects, such as swimming pools or landscaping.
- Be prepared to sacrifice portions of your property to achieve good protection.
- Try to work with adjacent affected property owners.



# Sandbag Filling and Placement

## Sandbags

When properly placed, sandbags will redirect water and debris flows away from property improvements.

See Figures 9, 10, 11, and 12 for details.

## Filling Sandbags

1. Fill sandbags half full. Sand is suggested if readily available; however, it is not mandatory, as any local soil may be used.
2. Fold top of sandbag down and rest bag on its folded top.



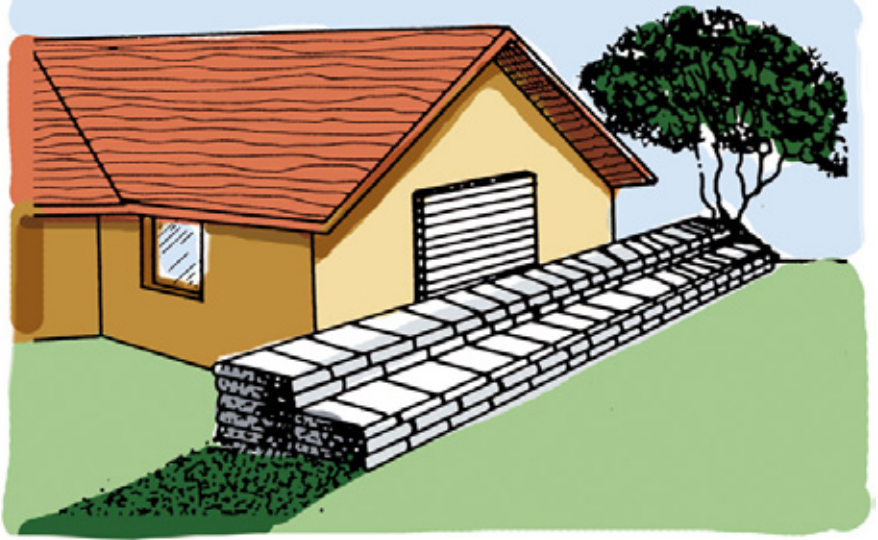
*Figure 9: Sandbag Filling and Placement – Proper filling and placement of sandbags is important.*

## Stacking Sandbags

Care should be taken to stack sandbags in accordance with the photos and illustrations. Place each sandbag as shown, completing each layer prior to starting the next layer. Limit placement to three layers unless a bracing is used as a backing or sandbags are stacked in a pyramidal style as shown in Figure 9.



## Sandbag Stacking



### Limitations of sandbags:

1. Sandbags will not seal out water.

2. Sandbags deteriorate when exposed for several months to continued wetting and drying. If bags are placed too early, they may not be effective when needed. If it is necessary that bags remain durable for a longer time, the addition of cement can increase effective life.

3. Sandbags are basically for low-flow protection (up to two feet). Protection from high flow requires a more permanent type of structure.

*Figure 10: Sandbag Stacking – Allow for a wider sand bag wall when stacking sand bags higher.*



## Sandbag Stacking



Figure 11: Sandbag Stacking – Allow for a wider sand bag wall when stacking sand bags higher.

## Building Protection

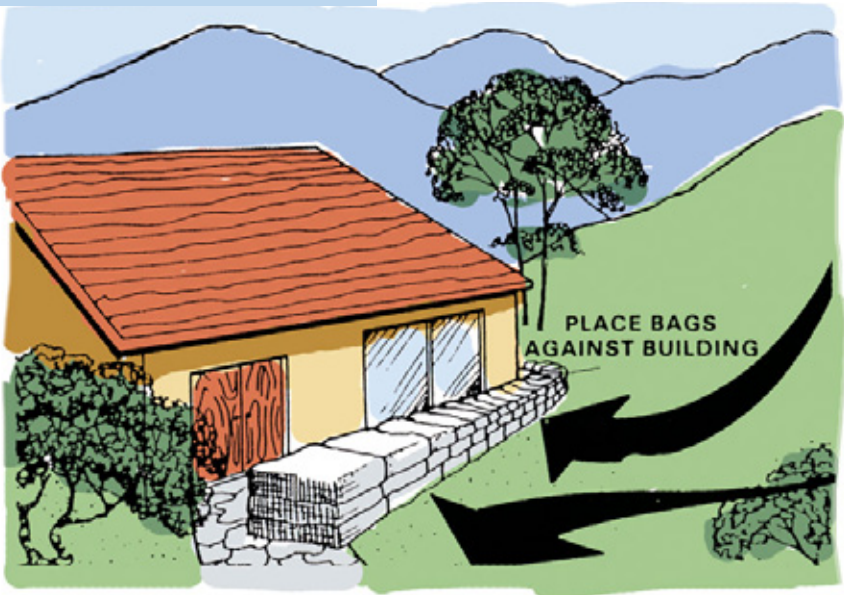
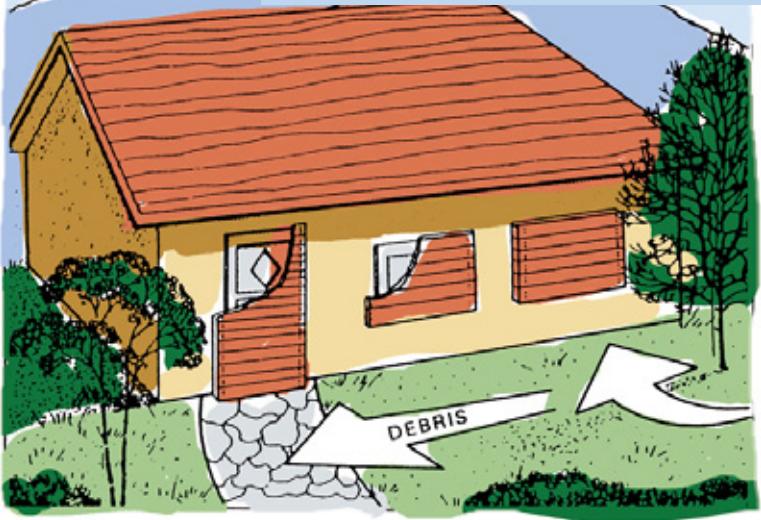


Figure 12: Building Protection – When backstopped against a building, the structure can help provide for sandbag stability and allows a taller wall.



## Window and Door Protection



*Figure 13: Window and Door Protection – Use of plywood or timbers can help protect windows and doors from damage.*

### D. Flood-Proofing Structures

Preventing water from entering a home or structure means assuring that the primary access points (roof, windows, doors, walls and floor/foundation) are all protected as much as possible. The following information addresses each of these areas

#### Roof and Gutters:

Be sure your roof does not leak. A simple inspection by a roofing expert, or observation during a storm of wet areas on the ceiling, should be adequate. A problem point can be near the chimney, where cinder blocks or bricks can leak, leading to infiltration down into the fireplace. Water proof sealing materials are available at most hardware and building supply outlets.

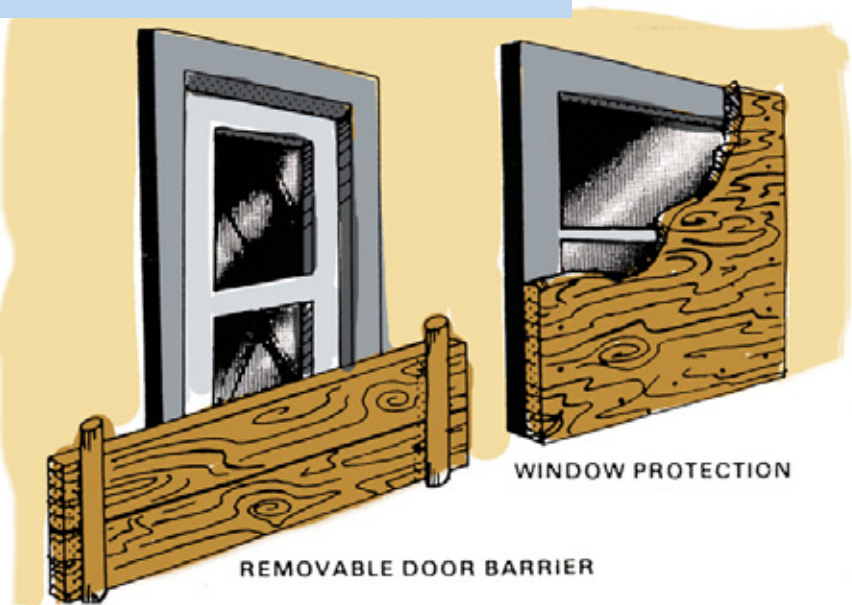
Gutters should be checked every year before the rains to be sure they are clear of leaves and debris, and free of holes, rust or other structural defects. Gutters are the primary means to move excess water from the roof to safe overland escape points; non-functioning gutters can lead to problems. Downspouts should be designed to direct runoff to overland escape points.

## Window and Door Protection:

It is important to provide protection against water intrusion at possible entry points of a structure, such as doors and windows. Prevent debris from entering doorways and windows with baffle boards. **See Figures 13 and 14.** A hazard may require complete closure of a door and necessitate the use of another entrance. To prevent water from seeping through a door, a rubber seal (similar to weather stripping) should be affixed to the door frame. When the door is closed, a watertight seal should result.

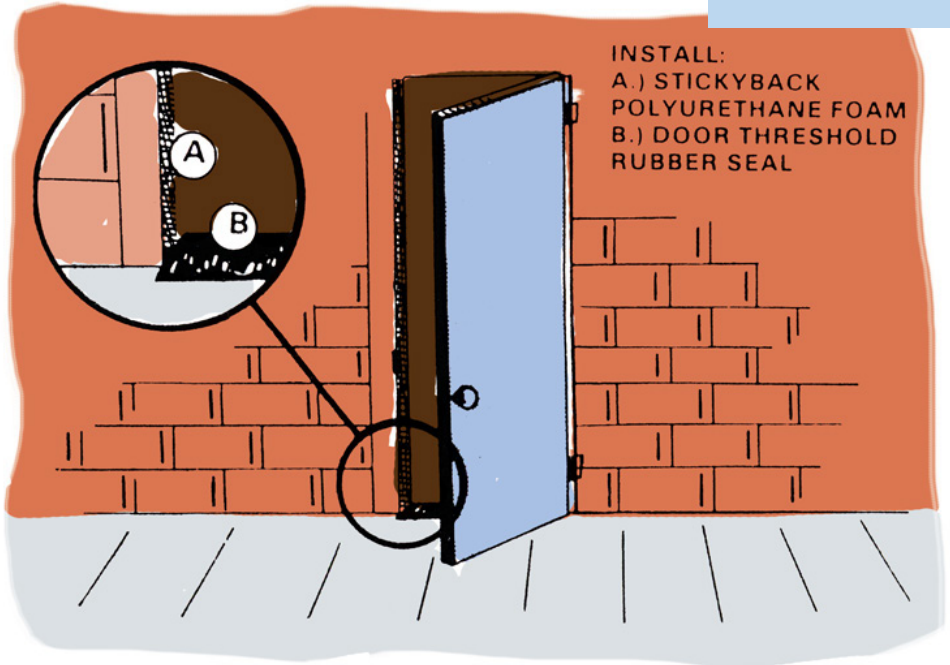
**See Figure 15.** To prevent water from seeping through a sliding glass door, a plastic sheet (2 to 3 mils thick) should be placed between the door and the sandbags or between the door and the plywood barrier. **See Figure 16.** This is not recommended for water levels above two feet.

## Typical Window/Door Protection



*Figure 14: Typical Window/Door Protection – Use of plywood or timbers can help protect windows and doors from damage.*

## Door Seal



*Figure 15: Door Seal – water can still seep through doors and other openings, the use of a seal can reduce in infiltration.*

Materials can be dismantled after the storm season and stored from year to year. Use low grade plywood, and overlap windows, vents or doors three to four inches on all sides. Secure the plywood with four or more nails, screws or bolts; a stake and board may also be used to wedge boards in place.

## Sliding Glass Door Sealing

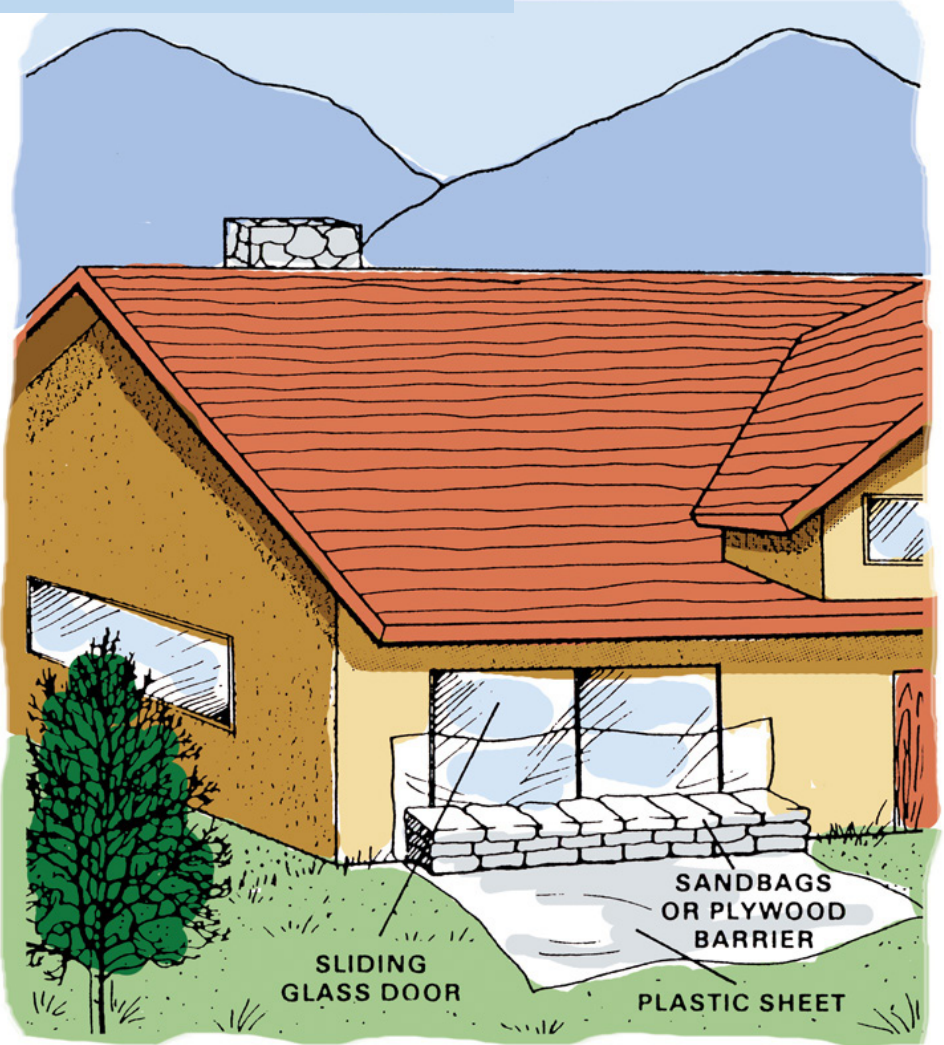


Figure 16: Sliding Glass Door Sealing – The use of plastic sheeting can help provide a waterproof seal on doors and openings.

## Timber Deflector

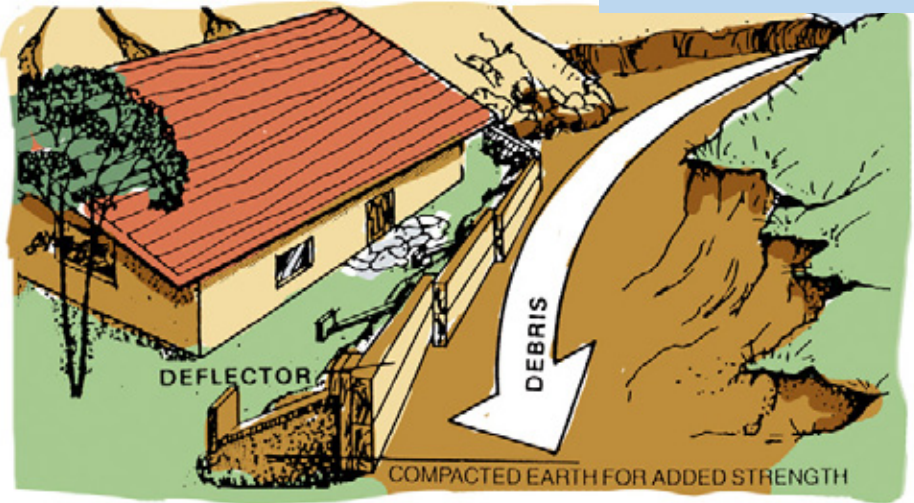


Figure 17: Timber Deflector – For use in particularly dangerous installations, timbers can be used to form a stronger deflector wall.

### Wooden Deflectors:

A wooden deflector is used outside a structure to deflect debris or water to the best overland escape. See Figures 17 and 18 for detail. Use low grade lumber and overlap sections with protruding face downstream. Drive stakes to at least one half their length to ensure proper anchorage. Place deflectors on solid level soil to reduce the hazard of undercutting. Don't attempt to use the lumber as a dam.

Earth packed behind the deflector will provide needed additional strength. If the deflector required is more than three feet in height, the house or structure will have to be protected with sandbags and used as a deflector.

## Typical Lumber Installation

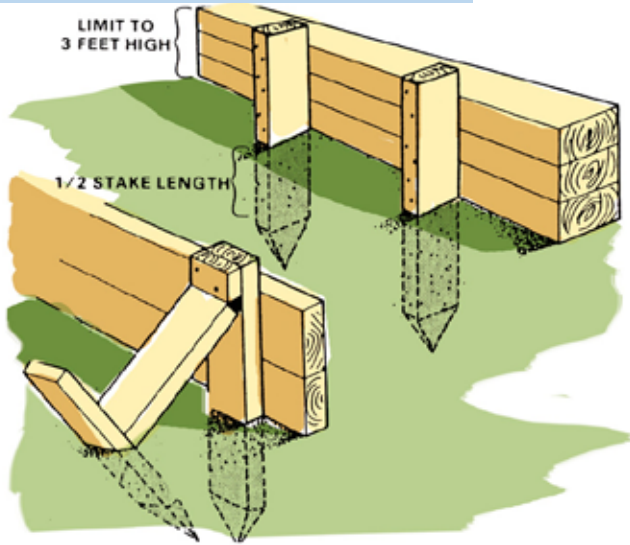


Figure 18: Typical Timber Installation – Timbers need solid anchoring to provide stability.

## Telephone Pole or Railroad Tie Barrier

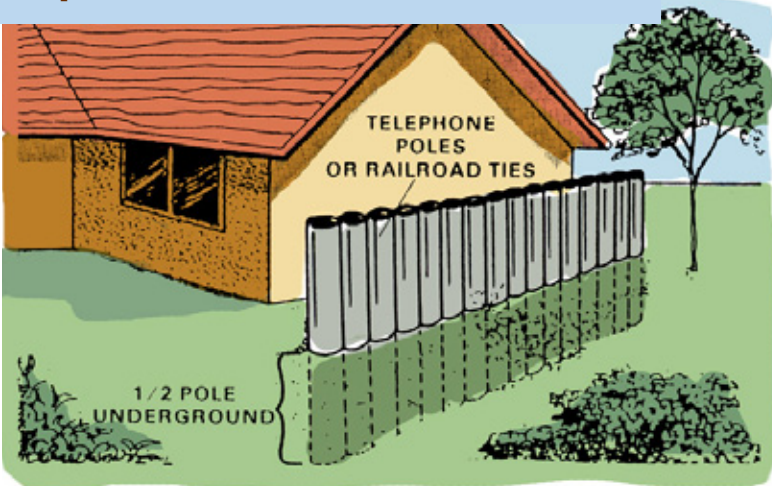


Figure 19: Telephone Pole or Railroad Tie Barrier – Use stronger materials for tall installations that may endure extreme conditions.

## Removable Driveway Barrier

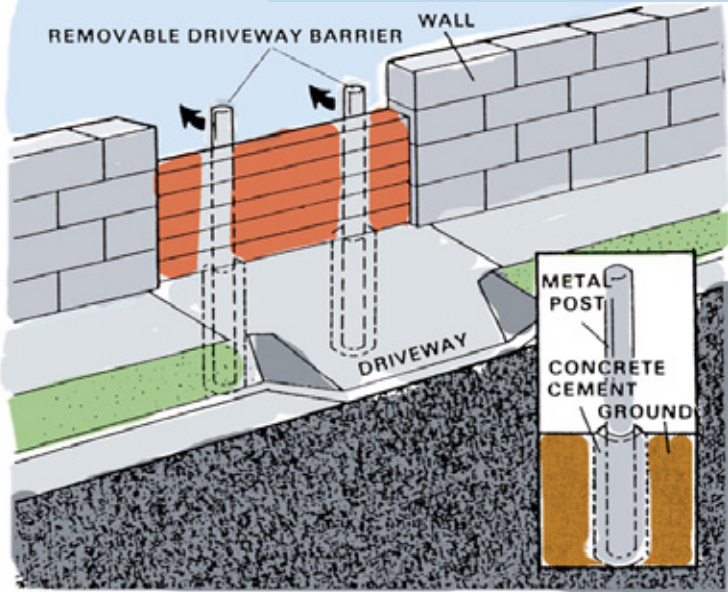


Figure 20: Removable Driveway Barrier – Permanent barriers may need access points that are open until needed.

## Engineered Walls

Concrete block and heavy-duty wood walls that are designed and built to withstand loads caused by water and debris are excellent for protection and durability. In many cases, such walls can be adapted to become part of the landscaping. Generally, these walls are expensive and should be considered permanent installations. **See Figures 19 and 20.**

*Caution: Do not rely on walls which have not been specifically engineered for protection.*

## General Prevention Strategies:

- Seal wood with water seal products such as Jasco.
- Install weather stripping.
- Be sure chimney and vent flashing is adequate.
- Clean out culverts and drains near structures to assure clear water path.

## **E. Flood Protection and Erosion Control in Newly Developed Areas**

Most newly developed areas lack good coverage from landscaping and ground covers and are therefore more susceptible to erosion. The following tips will help prepare these areas for flooding/erosion.

### **1. Keep water away from the area to be protected:**

a. For water flowing onto the property: Dig a small ditch with a hoe or shovel fairly close to the upper edge of the property. The pitch of the ditch should be nearly level to insure slow water movement. Provide for the ditch to drain into a natural watercourse or onto street pavement or to a well vegetated area.

b. For water falling on the property (rain): Dig the same type of small ditch at the top of each steep slope. Do not allow large amounts of water to concentrate along one route. On soils, especially susceptible to erosion, an additional degree of protection can be gained by using inexpensive plastic sheeting. These sheets should be overlapped like shingles and securely tied or staked down so that the majority of water does not reach the soil at all. Shrubs may be planted through the plastic by cutting a hole just large enough for planting. Where ditches are used in unstable soil, the ditch should be planted with ice plant or sowed with perennial grasses.

### **2. Strengthen the soil to resist erosion:**

a. Straw or wood chips are effective in holding the soil in place. They have the further value of increasing the organic content of the soil. Either material should be worked into the top few inches of the soil. Use a one-inch covering of chips, or less as slope and soil conditions indicate. Nitrogen fertilizer should be added.

b. Woven burlap or jute netting can be laid on the slope and tied down properly with stakes to prevent lifting by wind or water. Regular planting procedures can be followed before laying the burlap, since it will in no way interfere with establishing growth on the slope. The burlap decomposes eventually, but will remain long enough for grasses or plantings to become well established.



## F. Erosion Control in Burned Area

It is especially important to provide adequate protection against flooding and erosion for structures in recently burned areas. Planting in burned areas is similar to planting in newly developed areas. Consult a landscape professional for appropriate ground covers and erosion control techniques. Plant throughout the burned area. It may be necessary to irrigate in order to assure early growth.

Since rains can normally be expected to start in October, plant in the early fall to take advantage of this extra watering.

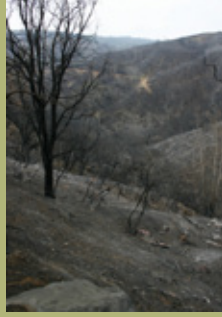
For more information about soil erosion and prevention, contact the Natural Resources Conservation Service (formally the Soil Conservation Service) at (805) 928-9269 or call a landscape architect or contractor with erosion control experience.

See **Figure 21** for a drawing demonstrating techniques to protect areas damaged by fires or other erosion problems.

### Additional Information:

- Know the location of interceptor ditches on slopes near your home.
- Clean silt and debris from these ditches to prevent overflow of storm waters.
- Remove debris which might obstruct the flow of water.
- Watch storm drain inlets and culvert entrances in your vicinity.





## Fire and Erosion

Following a fire, watershed conditions change dramatically.

Impacts associated with Fires include:

- a dramatic increase in rainfall runoff velocity and volume,
- extremely high yields of silt and sediments off hillsides and adjacent properties,
- potential for debris flows including large rocks and trees,
- heightened potential for creek overflow and flooding.



This hillside is susceptible to erosion problems caused by flooding after a fire.

Erosion mitigation measures have been implemented on this hillside after a fire in order to prevent erosion problems and encourage plant growth.



## Fire and Erosion

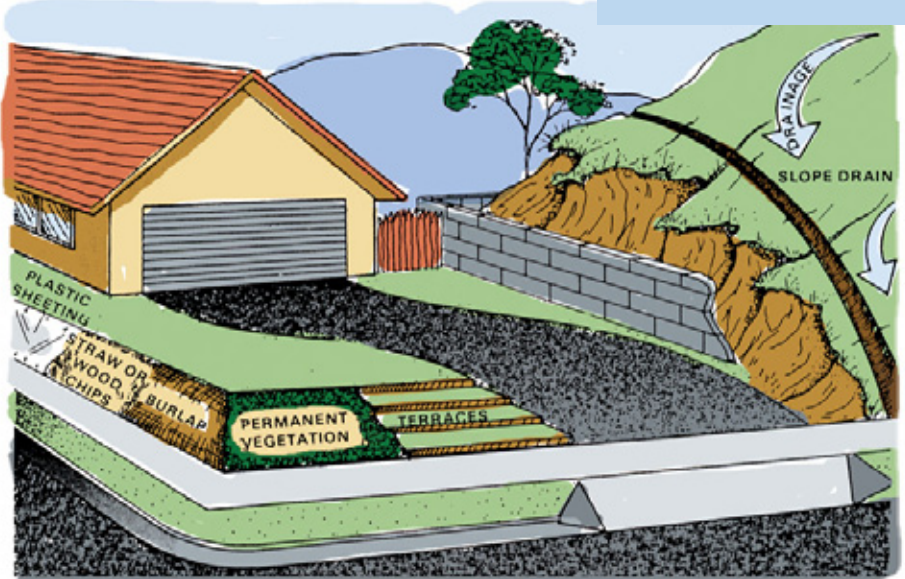


Figure 21: Fire & Erosion – This property features typical alternatives to erosion control.

### Individual Property Owners

Individual property owners have the responsibility to provide protection to their private property. Property owners should carefully survey their property and identify hazards and the steps to protect their property.

The assistance of technical professionals may be advantageous. Hazards could take the form of hillside erosion from your property, or from your neighbor's, flooding and debris from denuded properties, and creek overflows.



## G. General Preparation

*Learn the safest route from your home* or place of business to high, safe ground if you should have to evacuate in a hurry.

*Keep a portable radio*, emergency cooking equipment, and flashlights in working order.



*Persons who live in frequently flooded areas* should keep on hand materials such as sandbags, plywood, plastic sheeting, and lumber which can be used to protect property. Remember, sandbags should not be stacked directly against the outer walls of a building, since, when wet, the bags may create added pressure on the foundation.



## H. Flood Insurance

Standard homeowner's policies do not cover flood loss. You should evaluate the need for flood insurance in your situation, depending on where your property is located. Contact your property/casualty agent or broker about flood insurance, which is offered through the National Flood Insurance Program. Generally, there is a 30-day waiting period for this policy to become effective, so don't wait until the last minute to apply.

Until the late 1960s, flood insurance was practically unavailable to home and business owners. Since private insurance firms were unwilling to assume the financial risk alone, Congress voted in 1968 to create the National Flood Insurance Program (NFIP). This federal program provided flood insurance at reasonable cost in exchange for management of flood prone areas by local communities.

Today, you can insure almost any enclosed building and its contents against flood loss, as long as your community is participating in the NFIP. All areas within the county participate in NFIP.

To facilitate submitting claims after a flood, **make an itemized list of personal property, including furnishings, clothing, and valuables. Photographs of your home - inside and out - are helpful.** This will assist an adjuster in settling claims and will help prove uninsured losses, which are tax deductible.

Remember to keep your insurance policies and a list of personal property in a safe place, such as a safety-deposit box. Know the name and location of the agent(s) who issued these policies.



*Be sure to make an itemized list.*



## SECTION 2

### During the Flood: Emergency Response Tips

#### Tips: If a Flood Comes

Personal safety is the most important consideration during a flood. Since floodwaters can rise very rapidly, you should be prepared to evacuate before the water level reaches your property.

**Know several safe routes of escape** should you need to evacuate quickly.

**Keep a battery-powered radio** tuned to a local station, and follow all emergency instructions.

**If you're caught in the house** by suddenly rising waters, move to the second floor and, if necessary, to the roof. Take warm clothing, a flashlight, and portable radio with you. Then wait for help...don't try to swim to safety. Rescue teams will be looking for you in/at the house.

**When outside the house, remember... FLOODS ARE DECEPTIVE.** Try to avoid flooded areas, and don't attempt to walk through floodwaters that are more than knee deep. Do not attempt to cross swiftly flowing water.

**If, and only if, time permits...** there are several precautionary steps that can be taken.

**Turn off all utilities** at the main power switch and close the main gas valve if evacuation appears necessary. Do not touch any electrical equipment unless it is in a dry area and you are standing on a piece of dry wood while wearing rubber gloves and rubber-soled boots or shoes.

**Move valuable papers, jewelry, clothing, and other important possessions** to upper floors or higher elevations.

**Fill bathtubs sinks and jugs with clean water** in case regular supplies are contaminated. You can sanitize these storage containers by first rinsing with bleach.

**Board up windows** or protect them with storm shutters.

**Bring outdoor possessions inside the house** or tie them down securely. This includes lawn furniture, garbage cans, tools, signs, and other moveable objects that might be swept away or hurled about.

**If it is safe to evacuate by car**, you should consider the following. Stock the car with nonperishable foods (like canned goods), a plastic container of water, blankets, first aid kit, flashlights, dry clothing and any special medication needed by your family.

**Do not drive where water is over the roads.** Parts of the road may already be washed out.

**If your car stalls in a flooded area**, abandon it as soon as possible. Floodwaters can rise rapidly and sweep a car and its occupants away. Many deaths have resulted from attempts to move stalled vehicles.



**Flood waters are swift and dangerous.**

## Tips: After a Flood

If your home, apartment or business has suffered flood damage, immediately call the agent or broker who handles your flood insurance policy. The agent will then submit a loss form to the National Flood Insurance Program. An adjuster will be assigned to inspect your property as soon as possible.

**Prior to entering a building**, check for structure damage.

Make sure it is not in danger of collapsing. Turn off any outside gas lines at the meter or tank, and let the house air for several minutes to remove foul odors or escaping gases.

**Upon entering the building**, do not use open flame as a source of light since gas may still be trapped inside; a battery-operated flashlight is ideal.

**Watch for electrical shorts or live wires before** making certain that the main power switch is turned off. Do not turn on any lights or appliance until an electrician has checked the system for short circuits.

**Cover broken windows** and holes in the roof or walls to prevent further weather damage. The expense of these temporary repairs is usually covered under your flood insurance policy (subject to the policy deductible). Therefore, it is important to save receipts.

**Proceed with immediate clean up measures** to prevent any health hazards. Perishable items which pose a health problem should be listed and photographed before discarding. Throw out fresh food and previously opened medicines that have come in contact with floodwaters.

**Water for drinking and food preparation** should be boiled vigorously for ten minutes, until such time as the public water system has been declared safe. Another method of disinfection is to mix 1/2 teaspoon of liquid commercial laundry bleach with 2<sup>1/2</sup> gallons of water; let stand for five minutes before using. The flat taste can be removed by pouring the water from one container to another or adding a pinch of salt. In an emergency, water may be obtained by draining a hot water tank or melting ice cubes.



**Refrigerators, sofas, and other hard goods** should be hosed off and kept for the adjuster's inspection. A good deodorizer when cleaning major kitchen appliances is to add one teaspoon of baking soda to a quart of water. Any partially damaged items should be dried and aired; the adjuster will make recommendations as to their repair or disposal. Take pictures of the damage done to your building and contents.

**Take all wooden furniture outdoors**, but keep it out of direct sunlight to prevent warping. A garage or carport is a good place for drying. Remove drawers and other moving parts as soon as possible, but do not pry open swollen drawers from the front. Instead, remove the backing and push the drawers out.

**Shovel out mud while it is still moist** to give walls and floors a chance to dry. Once plastered walls have dried, brush off loose dirt. Wash with a mild soap solution and rinse with clean water; always start at the bottom and work up. Ceilings are done last. Special attention at this early stage should also be paid to cleaning out heating and plumbing systems.

**Mildew can be removed from dry wood** with a solution of 4 to 6 tablespoons of trisodium phosphate (TSP), 1 cup liquid chlorine bleach, and 1 gallon water.

**Clean metal at once** then wipe with a kerosene-soaked cloth. A light coat of oil will prevent iron from rusting. Scour all utensils, and, if necessary, use fine-steel wool on unpolished surfaces. Aluminum may be brightened by scrubbing with a solution of vinegar, cream of tartar, and hot water.

**Quickly separate all laundry items** to avoid running colors. Clothing or household fabrics should be allowed to dry slowly, away from direct heat, before brushing off loose dirt. If you cannot get to a professional cleaner, rinse the items in lukewarm water to remove lodged soil. Then wash with mild detergent; rinse and dry in sunlight.

**Flooded basements should be drained and cleaned** as soon as possible. However, structural damage can occur by pumping out the water too quickly. After the floodwaters around your property have subsided, begin draining the basement in stages, about 1/3 of the water volume each day.

## Related Links

Use the following links to find more flood related resources and information.

### **The Federal Emergency Management Agency (FEMA)**

[www.fema.gov/](http://www.fema.gov/)

[www.fema.gov/hazard/flood/index.shtm](http://www.fema.gov/hazard/flood/index.shtm)

### **State of California Department of Water Resources**

[www.water.ca.gov/floodmgmt/](http://www.water.ca.gov/floodmgmt/)

### **State of California Governors Office of Emergency Services**

[www.oes.ca.gov/](http://www.oes.ca.gov/)

### **National Flood Insurance Program**

[www.floodsmart.gov](http://www.floodsmart.gov)

### **National Oceanic and Atmospheric Administration's National Weather Service**

[www.nws.noaa.gov/](http://www.nws.noaa.gov/)

### **U.S. Geological Survey (USGS)**

[www.usgs.gov/hazards/floods](http://www.usgs.gov/hazards/floods)

### **U.S. Department of Agriculture Natural Resources Conservation Service**

[www.ca.nrcs.usda.gov/programs/ewp](http://www.ca.nrcs.usda.gov/programs/ewp)

### **The Weather Channel**

[www.weather.com](http://www.weather.com)

### **Santa Barbara County Chapter of the American Red Cross**

[www.sbredcross.org](http://www.sbredcross.org)

# Information Sources

There are a number of places to turn for information during a major storm or flood event. These include:

**County Flood Control Information Line:** (805) 568-3451 – for local flood updates.

**National Weather Service and the Weather Channel** – for detailed weather reports and flood information by region. Consult television listings or call your cable company for the channel number.

**Weather radios** (available at electronics stores) – for detailed weather updates.

**Television and radio news** -for flood updates, weather conditions  
California Highway Patrol - Call for road conditions; Santa Barbara office: (805) 967-1234; Buellton office: (805) 688-5551.

*Special thanks to the Los Angeles County Department of Public Works for the use of original black and white diagrams and text assistance.*



***Flood debris can cause significant damage and presents serious dangers.***

**County of Santa Barbara**  
**Flood Control and Water Conservation District**  
**123 East Anapamu Street, Santa Barbara, CA 93101**  
**Tel: 805-568-3440 Fax: 805-568-3434**  
**[www.countyofsb.org/pwd/water](http://www.countyofsb.org/pwd/water)**

