READY! SET! GO!

YOUR PERSONAL FLOOD PREPARATION ACTION PLAN



Floods are the most common natural disaster in the United States. In fact, flooding causes more than $2 billion in property damage every year. Flooding is caused by a number of factors, but the two main concerns are rainfall intensity and duration. Intensity refers to the rate of rain fall, and duration is how long it rains.

During intense rain or extended periods of steady rain, even the smallest streams, creek beds or drains can overflow and cause flooding. Even if you live in a place where flooding is not typical, remember that anywhere it rains, it can flood.

Certain conditions, such as topography, new construction or erosion, can cause flooding in areas where it had not occurred before; areas near recent wildfires are particularly susceptible to flooding due to the loss of vegetation on the hillsides and natural waterways that become clogged with ash and debris.

The best preparation for possible flooding is to plan ahead. Preparations can consist of very simple home maintenance but, depending on your circumstances, may involve the construction of permanent drainage systems, walls or other measures to divert water, mud, or debris.

There are three simple steps you can take to help protect your home from floodwaters and debris: ***READY! SET! GO!***

GET READY!

- If you live in a flood-prone area, consider making permanent changes to your home, such as constructing retaining walls and raising your furnace and electrical panel above potential flood levels.
- Assemble an emergency supply kit as recommended by the American Red Cross.
- Consider purchasing flood insurance. Many homeowner policies do not cover flood damage.
- Create a list of items to take with you if you are asked to evacuate. In addition to your emergency supplies, consider items such as keys, cash and credit cards, photos, insurance papers, computers, prescriptions, and pet supplies.
- Clear debris from roof gutters, downspouts and drains, so water can flow and drain properly.
- Have a supply of sandbags and other flood prevention materials, such as plastic sheeting, plywood, and tarps.
- Check the roof for leaks or damage; pay special attention to areas where separation could occur, such as around the chimney.

FLOODS AND WILDFIRES:

Wildfires dramatically alter the natural landscape by removing vegetation and exposing soil to wind and rain. These changes substantially increase the risk of flash floods, mud, and debris flows, even in areas not usually prone to these hazards.

Normally, grasses, shrubs, and trees slow rainfall and improve soil absorption. Leaf litter further protects the soil from erosive rainfall. Wildfires burn vegetation and leaf litter to ash, leaving the soil exposed and less able to absorb rain. The result is increased runoff which can produce flash floods and debris or mud flows. Creeks and streams can be easily overwhelmed by these flows, as can streets and homes located below hillsides. The increased flood risk may last five years or more until the vegetation is restored.

Properly installed erosion control along slopes, or the installation of small diversion berms, can slow or redirect flows away from homes and streets. Planting or seeding areas which once supported native vegetation do not increase the vegetation recovery rate.

In non-native landscaped areas, property owners may replace vegetation with appropriate fire resistant, non-invasive plants. A local landscape professional can make recommendations for your particular area.

GET SET!

- Gather emergency supplies, evacuation items, and review evacuation routes in case you are asked to evacuate.
- Be aware that flash flooding can occur during periods of heavy or extended rain. If there is any possibility of a flash flood in your area, move immediately to higher ground. Do not wait for an evacuation order.
- Fill the gas tanks in your vehicles.
- Bring in outside furniture that could be carried away by floodwaters.
- Move furniture and other valuables to high points
- Fill and place sandbags, if necessary.
- Monitor gutters, drains, and other areas that could cause flooding. Clear away debris.

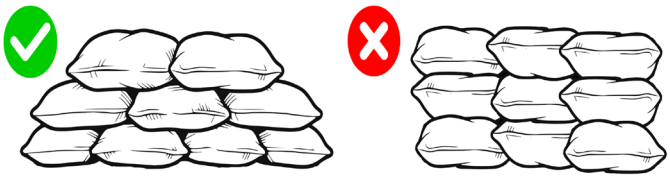
SANDBAGS: Properly placed sandbags will redirect water, mud, and debris, but they will not completely seal out water. Sandbags should be used for low-flow protection (up to about two feet). County of Los Angeles Fire Department fire stations have ready-to-fill sandbags, while select fire stations have sand available to fill the sandbags. LA County residents may visit **lacounty.pw/sandbags** for locations that have ready-to-fill sandbags and/or sand.

Sand and sandbags can also be purchased at many home improvement and hardware stores. Purchase sandbags early and make them a part of your emergency supplies, so they will be available if you need them.

- When possible, use close-weave burlap bags as sandbags.
- Fill sandbags 2/3-full. It is recomended to only use sand.
- Remove debris and obstructions from the area where the sandbags will be placed.
- When placing sandbags, fold the top of the sandbag down and rest the bag on its folded top.
- The sandbags should be placed lengthwise and parallel to the direction of the water flow. Step on the bags as they are placed to eliminate gaps.
- Place the sandbags to redirect water, mud or debris, not dam it.
- Do not place sandbags directly against the outer wall of a building. Wet bags can create added pressure on the foundation.
- Sandbags should be placed in staggered layers. Limit the layers to three unless the sandbags are braced or stacked in pyramids. It takes time to construct a wall of sandbags. Plan ahead! It is much easier to place sandbags before you are dealing with heavy runoff.

STACK LIKE BRICKS:

- **Offset each row so seams don't line up**
- **Overlap bags to minimize gaps**



GO!

- When asked to leave, evacuate.
- Remember to take your emergency supplies and valuables.
- Stay out of floodwaters and avoid moving water. Do not try to walk, swim, or drive through moving water.
- As little as six inches of moving water can knock you off your feet. Two feet of water is enough to carry away a passenger vehicle.
- Stay away from downed power lines and piles of debris.
- Constantly monitor the news media, social media, and other information outlets for weather and emergency updates.
- When evacuating, be aware of stream channels, drain channels, canyons, and other areas known to flood suddenly. Flash floods in these areas can occur without warning.
- Avoid parking or camping near streams, rivers, or creeks. The water may rise very quickly.
- Use a secondary evacuation route, if your primary route is blocked by water.

AFTER THE FLOOD: After evacuating, do not return until the flooding has subsided and authorities have reopened the area to residents. Even if you were not asked to evacuate, recently flooded areas can be very hazardous and extreme caution should be used.

- Stay away from areas damaged by floodwaters, mud, or debris flows.
- Continue to monitor the media and other sources of information. Additional flooding could occur.
- Do not drive around barriers. Roadways may have been washed out, undermined, or otherwise damaged by floodwaters.
- Stay on firm ground. If forced to walk through mud covered areas, use a stick to gauge the depth of the mud in front of you.
- Avoid standing water. It may be contaminated by oil, gasoline or sewage, or electrically charged by underground or downed power lines.
- Flooding may have caused familiar places to change. Floodwaters can erode roads and walkways. The area may be very slippery and make walking difficult.
- Flood debris may hide animals, broken glass, or other dangerous items.
- Use extreme caution when entering any buildings that were subjected to floodwaters, mud, or debris. Floodwaters may have caused hidden damage, affected electrical systems, or undermined the foundation.
- Remove wet contents immediately. Clean and disinfect everything that got wet and safely discard anything that actually absorbed flood water.
- Throw out any food items that have come in contact with floodwater. Assume that drinking water is unsafe until you are told otherwise by authorities.
- Take photos of damage for insurance claims.
- Look for fire hazards: broken gas lines, flooded electrical circuits, etc.
- Cover broken windows, holes in the roof, etc., to prevent further damage.