# Flooding in California

* Do you live in California? Do you visit California?
* Do you know when it typically floods in California?
* Do you know that every county in California has been declared a federal flood disaster area at least once in the last 20 years?

## Types of Flooding

California experiences many types of flooding: alluvial fan, debris flow, riverine, coastal, tsunami, flash, and localized floods. Not every part of California experiences every type of flooding, but the results of each is the same: without proper preparedness, lives, homes, infrastructure and agriculture are lost, and damage to the environment and economy is likely. Preparing for devastating floods is critical.

### Important Facts About Floods:

* More people die in floods each year than in any other type of natural disaster. Between 1975 and 2005, an average of 127 people died in floods each year in the U.S.
* Six inches of fast-moving water can knock an adult off his or her feet.
* Six inches of water will reach the bottom of most passenger cars, causing loss of control and possible stalling.
* 18 inches of water will float most cars; two feet of water can float SUVs and trucks.
* It is ***extremely*** difficult to see how deep flood water is, so don’t drive through water on the roadway.
* Just one foot of water can cause more than $54,000 in damages to a $150,000 single-family home.
* A home in the 100-year floodplain is almost twice as likely to suffer damage from flooding than from fire during the life of a 30-year mortgage.
* Statewide, $5.4 billion in crop values are exposed to the 100-year floodplain.
* Statewide, 1.4 million people live and work in the 100-year floodplain.

### BE AWARE, BE PREPARED

### Know your risk and take action to reduce your risk.

* Stay away from rising creeks, streams and rivers.
* “Turn Around, Don’t Drown”™. Don’t drive through water on the roadway; during floods, more people are trapped and die in their vehicles than anywhere else.
* Know how to leave the area quickly if you see water start to rise.
* Be aware of your surroundings and know your evacuation routes.
* Do not attempt to cross flowing water that may be more than knee deep. If you have doubts, don't cross.
* Have an emergency preparedness kit. (Red Cross PDF for developing a kit: <http://www.redcross.org/www-files/Documents/pdf/Preparedness/checklists/Be_Red_Cross_Ready.pdf>)
* Choose a family meeting place and a plan for how to communicate during an emergency.
* If you live in a flood-prone area, consider buying flood insurance.
* During threatening weather, listen to local radio or TV news channels for watch and warning bulletins:
  + **Flood Watch** means it is possible that flooding will occur in a specified area. Be alert and prepared for a flood emergency.
  + **Flood Warning** means flooding is occurring or is imminent in a specified area. Move to safe ground immediately.

More information about flood types and flood preparedness can be found at the following websites:

* My Hazards: <http://myhazards.calema.ca.gov/>
* FloodSAFE Risk Notification: <http://www.water.ca.gov/floodmgmt/lrafmo/fmb/fas/risknotification/>
* Flood SMART – Flood Insurance Website: <http://www.floodsmart.gov/floodsmart/>
* National Weather Service – “Turn Around, Don’t Drown”™ website: <http://www.nws.noaa.gov/os/water/tadd/>

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| **Sidebar: What is a 100-Year Flood?**  “100-Year Flood” is a shorthand expression for a flood that has a 1-in-100 chance of being exceeded in any given year. This may also be expressed as the 1% annual chance of ex­ceedence flood or “1% annual chance flood” for short. Similarly, a 200-year flood has a 1-in-200 (or 0.5%) chance of being exceeded in any given year. |

**Localized Flooding**

* Do you live in or visit urbanized areas?
* If so, you probably have experienced, or will experience, stormwater flooding.
* Know your risk, know your role and take action to reduce your risk.

## Stormwater Flooding

Localized flooding occurs in both urban and nonurban areas during or after a storm. Any storm, particularly slow-moving, steady rain storms, can overwhelm drainage systems. When the system backs up, pooling water can flood streets, yards and even the lower floors of homes and businesses. Even less intense storms can cause this type of flooding when leaves, sediment and debris plug storm drains.

Localized flooding poses most of the same problems caused by larger floods, but typically impacts fewer people and affects geographically smaller areas. Flooding of this type tends to recur year after year. The aftermath can mean costly damage to homes and property. In many cases, stormwater flooding can easily be avoided by keeping stormdrains clear of debris, so the stormwater system can function properly.

## Impact

Stormwater flooding frequently causes property damage and traffic congestion. Keeping stormdrains clear of leaves and debris so the system can perform its task is the responsibility of residents and business owners.

### BE AWARE, BE PREPARED

### Know your risk and take action to reduce your risk.

* Be aware of your surroundings and know your evacuation routes.
* Keep your storm drains free of debris.
* If your property is prone to flooding, have sandbags, plastic sheeting and other flood-fighting materials on hand.
* Remember “Turn Around, Don’t Drown”™. Don’t drive through water on the roadway; during floods, more people are trapped and die in their vehicles than anywhere else.
* Have an emergency preparedness kit.
* If evacuating, have a plan for where to meet your family or friends and who to contact.
* If your property is subject to localized, stormwater flooding, consider purchasing flood insurance.

More information about flood types and flood preparedness can be found at these websites:

* My Hazards: <http://myhazards.calema.ca.gov/>
* FloodSAFE Risk Notification: <http://www.water.ca.gov/floodmgmt/lrafmo/fmb/fas/risknotification/>
* Flood SMART – Flood Insurance Website: <http://www.floodsmart.gov/floodsmart/>
* National Weather Service – “Turn Around, Don’t Drown”™ website: <http://www.nws.noaa.gov/os/water/tadd/>