

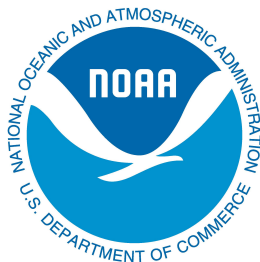
National Weather Service

Post Wildfire Flash Flood and Debris Flow Guide



Created by National Weather Service Los Angeles/Oxnard
August 2015

www.weather.gov/losangeles



Weather-Ready Nation

Purpose of this Guide

Post wildfire flash flooding and debris flows are a realistic threat in Southern California for homes and communities located within or along a wildland urban interface that has experienced a recent wildfire. It is crucial to plan and prepare for this type of hazard to prevent and reduce the loss of life and property, and to develop community resilience.

The National Weather Service Office in Oxnard, CA has prepared and printed this comprehensive guide in a user-friendly manner with step-by-step guidance on what to do before, during, and after floods that could potentially follow recent wildfires.

It is imperative for you to take time to develop a family disaster plan, review emergency preparations and checklists regularly, build disaster supply kits in waterproof, easy-to-carry containers, and stay aware of current weather situations. Monitor statements, watches, and warnings issued by National Weather Service offices and listen to NOAA weather radio and local media broadcasts.

The Emergency management community and its partners are committed to keeping Southern California residents safe when there is a threat of flash flooding and debris flows following wildland fires. We ask for your help as well by reading and studying this guide to prepare. You may also visit Weather-Ready Nation at www.nws.noaa.gov/com/weatherreadynation to learn more about NOAA's initiative about building community resilience in the face of increasing vulnerability to extreme weather events.

This guide was prepared by the National Weather Service Forecast Office in Oxnard, CA through funding provided by the NWS Advanced Hydrologic Prediction Service (AHPS).

Visit us at www.weather.gov/losangeles.

You can also find us on Facebook www.facebook.com/NWSLosAngeles,

Twitter www.twitter.com/NWSLosAngeles, and

YouTube www.youtube.com/user/NWSLosAngeles.

Additional USGS information can be found at: <http://landslides.usgs.gov/research/wildfire/>

Los Angeles/Oxnard Weather Forecast Office

520 North Elevar Street

Oxnard, California 93030

www.weather.gov/losangeles

Phone: (805) 988-6610



Acronyms used in this Guide

CA - California

EAS - Emergency Activation System

FEMA - Federal Emergency Management Agency

NOAA - National Oceanic and Atmospheric Administration

NWS - National Weather Service

TADD- Turn Around Don't Drown

USGS - United States Geological Survey

WEA - Weather Emergency Alert

WRN - Weather-Ready Nation

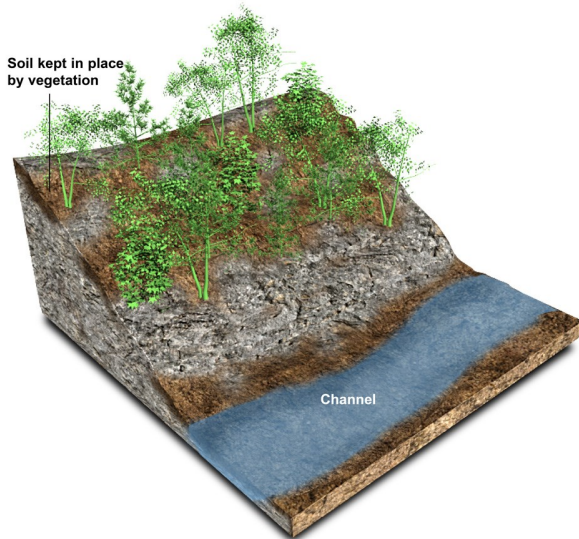
Front cover photo: Camarillo Springs, CA; December 12, 2014; Photo courtesy of the County of Ventura Office of Emergency Services

Back cover photo: La Canada Flintridge, CA; February 6, 2010; Photo courtesy of the United States Geological Survey

What is a Debris Flow?

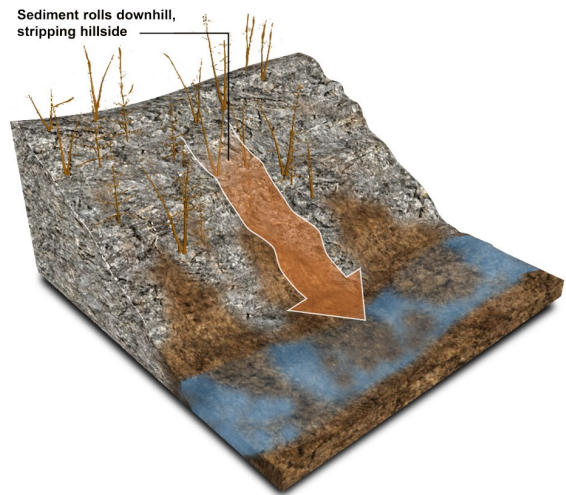
Before fire and rain

Soil is trapped on steep rocky hills by vegetation.



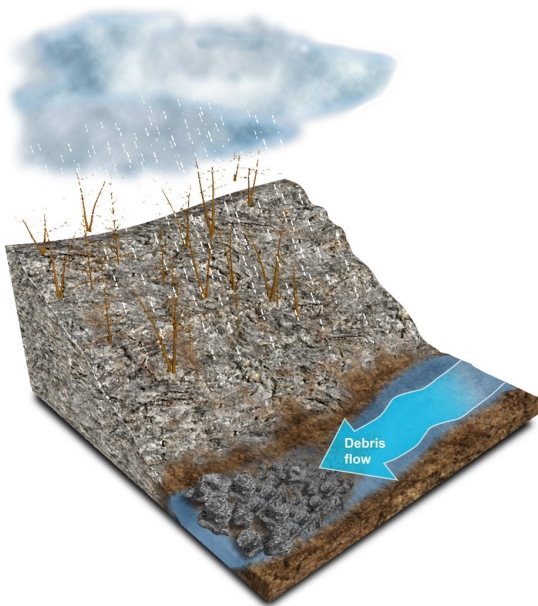
After fire

During summer's fire season, vegetation is burned, causing sediment to roll down steep hills. Within a few hours or days, channel bottoms are loaded with loose sediment.



Rain and runoff

During an intense rain, the water and runoff move sediment in the steep channels, producing debris flows.



Additional post wildfire flash flooding and debris flow web page sources:

<http://tinyurl.com/ye78vmw>
<http://tinyurl.com/obvoo78>



December 24, 2003 Devore, CA Debris Flow Video from the United States Geological Survey (USGS):

<http://tinyurl.com/nkogbel>



USGS Emergency Assessment of Post Debris Flow Hazards

<http://tinyurl.com/pezpzfe>



Graphics courtesy of Raoul Rañoa <http://tinyurl.com/pspptm7> Copyright © 2014. Los Angeles Times. Reprinted with permission.

Flood After Fire Fact Sheet

Floods are the most common and costly natural hazard in the nation. Whether caused by heavy rain, thunderstorms, or the tropical storms, the results of flooding can be devastating. While some floods develop over time, flash floods—particularly common after wildfires—can occur within minutes after the onset of a rainstorm. Even areas that are not traditionally flood-prone are at risk, due to changes to the landscape caused by fire.

Residents need to protect their homes and assets with flood insurance now—before a weather event occurs and it's too late.

WILDFIRES INCREASE THE RISK

You may be at an even greater risk of flooding due to recent wildfires that have burned across the region. Large-scale wildfires dramatically alter the terrain and ground conditions. Normally, vegetation absorbs rainfall, reducing runoff. However, wildfires leave the ground charred, barren, and unable to absorb water, creating conditions ripe for flash flooding and mudflow. Flood risk remains significantly higher until vegetation is restored—up to 5 years after a wildfire.

Flooding after fire is often more severe, as debris and ash left from the fire can form mudflows. As rainwater moves across charred and denuded ground, it can also pick up soil and sediment and carry it in a stream of floodwaters. These mudflows can cause significant damage.

For example, in June 2011, the Las Conchas Wildfire charred more than 150,000 acres in New Mexico. One month later, heavy rains flooded the burn area, prompting a Presidential Disaster Declaration.

BE FLOODSMART – REDUCE YOUR RISK

A flood does not have to be a catastrophic event to bring high out-of-pocket costs, and you do not have to live in a high-risk flood area to suffer flood damage. Around twenty percent of flood insurance claims occur in moderate-to-low risk areas. Property owners should remember:

- **The Time to Prepare is Now.** Gather supplies in case of a storm, strengthen your home against damage, and review your insurance coverages. No flood insurance? Remember: it typically takes 30 days for a new flood insurance policy to go into effect, so get your policy now.
- **Only Flood Insurance Covers Flood Damage.** Most standard homeowner's policies do not cover flood damage. Flood insurance is affordable. An average flood policy costs around \$600 a year, rates start at just \$129 a year for homes in moderate- to low-risk areas.
- **Plan Ahead.** Plan evacuation routes. Keep important papers in a safe, waterproof place. Conduct a home inventory; itemize and take pictures of possessions.

Everyone is at risk for spring flooding, yet many remain unprotected. Just a few inches of water can cause tens of thousands of dollars in damage. The average flood claim in 2010 was approximately \$28,000, and without flood insurance, many must cover the costs to repair or rebuild on their own. Residents should consider their risk and the consequences of a flood event, and make the choice to protect themselves.

Visit **FloodSmart.gov** (or call **1-800-427-2419**) to learn more about individual flood risk, explore coverage options and to find an agent in your area.

Flood After Fire Risks

Floods are the number 1 natural disaster in the United States. Flooding causes damage and destruction across all regions, wiping out homes and businesses. However, many residents and business owners are unaware that they qualify for flood insurance. You can take steps to reduce the financial impact of flooding before disaster strikes.

One important step is understanding your risk. Wildfires dramatically change landscape and ground conditions, which can lead to increased risk of flooding due to heavy rains, flash flooding, and mudflows.

Residents and business owners are urged to purchase flood insurance now to guarantee financial protection from flooding. There typically is a 30-day waiting period before flood insurance takes effect. But the Biggert-Waters Flood Insurance Reform Act of 2012 allows for an exception to the waiting period in certain cases where property is affected by flooding on burned Federal land that is a result of, or is exacerbated by, post-wildfire conditions. For more information, please contact your insurance agent.

Flood after Fire: The Risks

You may be at an even greater risk of flooding after a wildfire. Normally, vegetation absorbs rainfall, reducing runoff. However, wildfires leave the ground charred, barren, and unable to absorb water, creating conditions ripe for flash flooding and mudflow. Flood risk remains significantly higher until vegetation is restored—up to 5 years after a wildfire. Wildfires can happen

almost anywhere, but the most commonly affected states are Arizona, California, Idaho, Nevada, Oregon, and Washington.

Heavy Rains

Excessive amounts of rainfall can happen throughout the year, putting your property at risk. Properties directly affected by fires and those located below or downstream of burn areas are most at risk for flooding.

Flash Floods

A flash flood is a rapid flooding of low-lying areas in less than 6 hours, which can be caused by intense rainfall. Flash floods are known to roll boulders, tear out trees, and destroy buildings and bridges.

Mudflows

Mudflows are rivers of liquid and flowing mud on the surface of normally dry land, often caused by a combination of brush loss and subsequent heavy rains. Mudflows can develop when water saturates the ground, such as from rapid snowmelt or heavy or long periods of rainfall, causing a thick, liquid, downhill flow of earth. Mudflows are covered by flood insurance but are different from other non-covered earth movements where there is not a flowing characteristic—such as landslides or slope failures.

To learn more about your risk for flooding and how to prepare for floods, visit [FloodSmart.gov/wildfire](https://www.floodsmart.gov/wildfire).

Preparing for a Flood

Preparing for a Flood

Residents and businesses need to prepare in advance for flood conditions. Before the threat of flooding becomes imminent, residents and business owners should:

- Purchase a flood insurance policy
- Review their current insurance policy and become familiar with what is covered and ensure the limits adequately protect their building and personal belongings.
- Make an emergency kit, plan evacuation routes, and keep important papers in a safe, water-proof place.
- Itemize and take pictures of possessions.

For more information regarding a policy, please call your insurance agent. You can also visit **FloodSmart.gov** or call 1-800-427-2419 to find a local agent.



Harvard Burn Area near Burbank, CA
September 25, 2007
Photo courtesy of NOAA National Weather Service

Flood Prevention and Response Resources

Following are some resources to assist homeowners prepare for the risks of post wildfire flooding.

Los Angeles County

Fire Disaster Information

<http://dpw.lacounty.gov/wrd/fire/>

Homeowners Guide for Flood, Debris, and Erosion Control

<http://tinyurl.com/nkwlzgv>



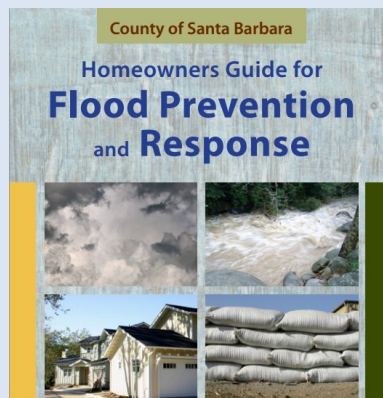
Santa Barbara County

Flood Preparation Resources and Information

<http://tinyurl.com/nopeau3>

Homeowners Guide for Flood Prevention and Response

<http://tinyurl.com/p3lepds>



Ventura County

A Homeowner's Guide for Flood Prevention and Response

<http://tinyurl.com/o4kvghh>



California Department of Water Resources

State of California Emergency Flood Fighting Methods

<http://tinyurl.com/24yhnxo>



San Luis Obispo County

Get Ready SLO

Winter Weather Preparedness

<http://tinyurl.com/onr4np3>



Southern California Debris Flows



Camarillo Springs near Camarillo, CA
San Como Lane
December 12, 2014
Photo courtesy of the County of Ventura



La Canada-Flintridge, CA
Ocean View Boulevard
February 6, 2010
Photo courtesy of the United States Geological Survey



La Canada-Flintridge, CA
Ocean View Boulevard
February 6, 2010
Photo courtesy of the United States Geological Survey

Preparedness Information

Educate Yourself Before a Flood

After getting flood insurance, there are several things you can do to minimize losses in your home and ensure your family's safety.

1. Safeguard your possessions.

Create a personal flood file containing information about all your possessions and keep in a secure place, such as a safe deposit box or waterproof container. This file should have:

- A copy of your insurance policies with your agents contact information.
- A household inventory (videotaped or photographed). Create files that include serial numbers and store receipts for major appliances and electronics. Have jewelry and artwork appraised.
- Copies of all other critical documents, including finance records and receipts of major purchases.

2. Prepare your house.

- Make sure your sump pump is working and install a battery-operated backup, in case of power failure. Installing a water alarm will also let you know if water is backing up in your basement.
- Clear debris from gutters and downspouts.
- Anchor any fuel tanks.
- Raise your electrical components at least 12 inches above your home's projected flood elevation.
- Move furniture, valuables, and important documents to a safe place.

3. Develop a family emergency plan.

- Create a safety kit with drinking water, canned food, first aid, blankets, a radio, and a flashlight.
- Post emergency telephone numbers by the phone and teach your children how to dial 911.
- Plan and practice a flood evacuation route with your family. Know safe routes from home, work, and school that are on higher ground.
- Ask an out-of-state relative or friend to be your emergency family contact.
- Have a plan to protect your pets.

Information from FloodSmart.gov.

Preparedness Information

Family Plan

- Identify the types of hazards that could affect your family. Know your home's vulnerability to storm surge, flooding, and wind.
- Locate a safe room or the safest areas in your home for each hazard. In certain circumstances, the safest areas may not be in your home but within your community.
- Determine escape routes from your home and places to meet. These should be measured in tens of miles rather than hundreds of miles.
- Have an out-of-state friend as a family contact so all your family members have a single point of contact.
- Make a plan now for what to do with your pets should you need to evacuate.
- Post emergency telephone numbers by your phones and make sure your children know how and when to call 911.
- Check your insurance coverage. Flood damage is not usually covered by homeowners insurance.
- Stock non-perishable emergency supplies and a Disaster Supply Kit.
- Use a NOAA weather radio. Remember to replace its batteries every 6 months, as you do with your smoke detectors.
- Take First Aid, CPR, and disaster preparedness classes.

Information from FloodSmart.gov.

Preparedness Information

Disaster Supply Kit

Supply Kit Checklist

- Water—at least 1 gallon daily per person for 3 to 7 days
- Food—at least enough for 3 to 7 days
 - ◊ Non-perishable packaged or canned food or juices
 - ◊ Food for infants or the elderly
 - ◊ Snack foods
 - ◊ Non-electric can opener
 - ◊ Cooking tools and fuel
 - ◊ Paper plates and plastic utensils
- Blankets, pillows, etc.
- Clothing—Seasonal, rain gear, sturdy shoes, etc.
- First aid kit, medicines, and prescription drugs
- Special items for babies and the elderly
- Toiletries, hygiene items, and moisture wipes
- Flashlights
- Batteries
- Battery-operated NOAA weather radio
- Fully charged cell phone with extra battery and a traditional (non cordless) telephone set
- Cash (with some small bills) and credit cards—banks and ATMs may not be available for extended periods
- Keys
- Toys, books, and games

Information from FloodSmart.gov.

Preparedness Information

Evacuation Tips

Have a place to Go

- If ordered to evacuate, do not wait to depart. If possible, leave before local officials issue an evacuation order for your area. Even a slight delay in starting your evacuation will result in significantly longer travel times as traffic congestion worsens.
- Select an evacuation destination that is nearest to your home, preferably in the same county, or at least minimize the distance you must travel in order to reach your intended shelter location.
- In choosing your destination, keep in mind that the hotels and other sheltering options in most inland metropolitan areas are likely to be filled very quickly in a large evacuation event.
- If you decide to evacuate to another county or region, be prepared to wait in traffic. The large number of people who must evacuate will probably cause massive delays and major congestion along most designated evacuation routes; the larger the storm, the greater the probability of traffic jams and extended travel times.
- If possible, make arrangements to stay with the friend or relative who resides closest to your home and who will not have to evacuate. Discuss the details of your family evacuation plan with your intended host well beforehand.
- If a hotel or motel is your final intended destination during an evacuation, make reservations before you leave. Most hotels and motels will fill quickly once evacuations begin. The longer you wait to make reservations, even if an official evacuation order has not been issued for your area or county, the less likely you are to find room vacancies, especially along interstate highways and in major metropolitan areas. If you have pets, make sure the hotel or motel is pet-friendly.
- If you are unable to stay with friends or family and no hotel/motel rooms are available, go to a shelter as a last resort. Remember, shelters are not designed for comfort and do not usually accept pets. Bring your Disaster Supply Kit with you to the shelter.
- Make sure that you fill up your car with gas before you leave.

Information from FloodSmart.gov.

Preparedness Information

Pet Plan

Before the Disaster

- Make sure that your pets are current on their vaccinations.
- Have a current photograph.
- Keep a collar with identification on your pet and have a leash on hand to control your pet.
- Have a properly sized pet carrier for each animal—carriers should be large enough for the animal to stand and turn around.
- Plan your evacuation strategy and don't forget your pet! Specialized pet shelters, animal control shelters, veterinary clinics, friends, and relatives out of harm's way are ALL potential refuges for your pet during a disaster.
- If you plan to shelter your pet, work it into your evacuation route planning.

During the Disaster

- Animals brought to a pet shelter are required to have: proper identification collar and rabies tag, proper identification on all belongings, a carrier or cage, a leash, an ample supply of food, water, and food bowls, any necessary medications, specific care instructions, newspapers or trash bags for clean-up.
- Bring pets indoors well in advance of a storm—reassure them and remain calm.
- Pet shelters will be filled on a first come, first served basis. Call ahead and determine availability.

After the Disaster

- Walk pets on a leash until they become re-oriented to their home. Often, familiar scents and landmarks may be altered and pets could easily be confused and become lost. Also, downed power lines, reptiles brought in with high water, and debris can all pose a threat for animals after a disaster.
- If pets cannot be found after a disaster, contact the local animal control office to find out where lost animals can be recovered. Bring along a picture of your pet, if possible.
- After a disaster, animals can become aggressive or defensive—monitor their behavior.

Pet Disaster Supply Kit

- Proper identification including immunization records
- Ample supply of food and water
- A carrier or cage
- Medications
- Muzzle, collar, and leash

Information from FloodSmart.gov.

Flood Insurance

Residential Coverage

Protect Yourself With Flood Insurance

Just a few inches of water from a flood can cause tens of thousands of dollars in damage. From 2010 to 2014 the average residential flood claim amounted to more than \$39,000. In 2014, the average flood insurance policy premium was about \$700 per year. Flood insurance is the best way to protect yourself from devastating financial loss.

Flood insurance is available to homeowners, renters, condo owners/renters, and commercial owners/renters. Costs vary depending on how much insurance is purchased, what it covers and the property's flood risk.

All policy forms provide coverage for buildings and contents. However, you might want to discuss insuring personal property with your agent, since contents coverage is optional. Typically, there's a 30-day waiting period from date of purchase before your policy goes into effect. That means now is the best time to buy flood insurance.

www.fema.gov/national-flood-insurance-program



Weather Forecasts and Warnings

Severe weather and water warnings for southwest California including the counties of Los Angeles, Ventura, Santa Barbara, and San Luis Obispo.

An important step to prepare for a post wildfire flash flood and debris flow is to maintain an awareness of impending significant weather events by monitoring weather forecasts from the Los Angeles/Oxnard CA National Weather Service. Weather outlooks, watches, and warnings will be issued in advance of storms capable of producing flash floods and debris flows within and near recently burned areas.

The following pages provide you important resources, definitions, and web links for awareness and notification of these critical weather events.

Los Angeles/Oxnard Weather Forecast Office

520 North Elevar Street

Oxnard, California 93030

www.weather.gov/losangeles

Phone: (805) 988-6610



www.weather.gov/losangeles



@NWSLosAngeles



NWSLosAngeles



NWSLosAngeles

Other Useful National Weather Service Websites

www.weather.gov/sandiego

www.weather.gov

<http://tinyurl.com/nhvkpol>

<http://www.nws.noaa.gov/os/water/tadd/>



National Weather Service Forecast Office
Los Angeles/Oxnard

HOME NEWS ORGANIZATION Search [] Search

Local Forecast By "City, St" [City, St] Go

Regional News and Information:
Local News and Information:
• [Upcoming Spotter Talks](#) - Read about them here
• [NOAA Issues Winter Update](#) - Read about it here
• [El Niño is Back](#) - Find out more about it here
• [NOAA/USGS Debris Flow Project](#) - Read more here
• [Mobile Wireless Forecasts](#)

The Los Angeles Area
Click on Map for Area Forecasts and Information

Read watches, warnings & advisories

- High Wind Warning
- Freeze Warning
- Red Flag Warning
- Small Craft Advisory
- Marine Weather Statement
- Frost Advisory
- Wind Advisory
- Freeze Watch
- Hazardous Weather Outlook

Last map update: Nov. 29th 2006 at 12:54:29 pm PST
Map FAQ Glossary

Look at map for storm-based warning boxes

List of Watches and Warnings



Important NWS Definitions

- **Outlook** – Special Weather Statement

Storm information that may impact area several days from now.

- **Watch** - Flash Flood: 6-24 hours in advance

Life or property-threatening weather hazard possible. Conditions are favorable, but there is some uncertainty. Stay tuned for additional updates.

- **Warning** – Flash Flood: 5-60 minutes in advance

Life or property-threatening weather hazard is occurring now or likely to occur in the near future.

- **Advisory**

Nuisance level weather hazard is occurring now or likely to occur in the near future.



Photo courtesy of Reuters

NWS Notification Methods

- **NOAA Weather Radio All Hazards**

- ⇒ 24/7 broadcast of weather and emergency information
- ⇒ Alert feature with battery backup
- ⇒ <http://www.nws.noaa.gov/nwr/>

- **EAS – Emergency Alert System**

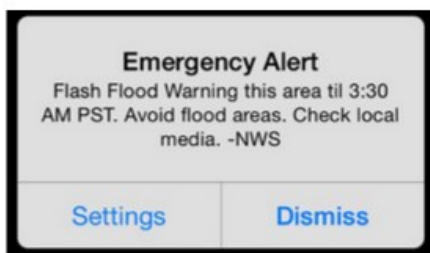
- ⇒ FCC requirement that media stations immediately rebroadcast weather warnings, such as flash floods, and other emergencies

- **Internet page for details**

- ⇒ weather.gov/losangeles

- **WEA - Wireless Emergency Alerts**

- ⇒ Cell phone messages with alert feature from FEMA
- ⇒ Opt-out only system
- ⇒ <http://go.usa.gov/39HbW>



WEA ALERT



NOAA Weather Radio

Emergency Preparedness Checklist

Emergency Preparedness Checklist (1 of 2)

SUPPLY OR DESCRIPTION	DUE DATE
CREATE AN EMERGENCY PLAN	
<input type="checkbox"/> Meet with household members to discuss the dangers of fire, severe weather, earthquakes and other emergencies. Explain how to respond.	
<input type="checkbox"/> Find the safe spots in your home for each type of disaster.	
<input type="checkbox"/> Discuss what to do about power outages and personal injuries.	
<input type="checkbox"/> Draw a floor plan of your home. Make two escape routes from each room.	
<input type="checkbox"/> Show family members how to turn off the water, gas and electricity at main switches when necessary.	
<input type="checkbox"/> Post emergency telephone numbers near telephones.	
<input type="checkbox"/> Teach children how and when to call 911, police and fire.	
<input type="checkbox"/> Instruct household members to turn on the radio for emergency information.	
<input type="checkbox"/> Pick one out-of-state and one local friend or relative for family members to call if separated during a disaster - it is often easier to call out-of-state contact's phone numbers.	
<input type="checkbox"/> Teach children out-of-state contact's phone numbers.	
<input type="checkbox"/> Pick two emergency meeting places. 1) A place near your home in case of a fire. 2) A place outside your neighborhood in case you cannot return home after a disaster.	
<input type="checkbox"/> Take a basic first aid and CPR class.	
<input type="checkbox"/> Keep family records in a water and fire-proof container.	
PREPARE A DISASTER SUPPLIES KIT	
Assemble supplies you might need in an evacuation. Store them in an easy-to-carry container such as a backpack or duffle bag.	
<input type="checkbox"/> A supply of water (one gallon per person per day). Store water in sealed, unbreakable containers. Identify the storage date and replace every six months.	
<input type="checkbox"/> A supply of non-perishable packaged or canned food and a non-electric can opener.	
<input type="checkbox"/> A change of clothing, rain gear, and sturdy shoes.	
<input type="checkbox"/> Blankets or sleeping bags.	
<input type="checkbox"/> A first aid kit and prescription medications.	
<input type="checkbox"/> An extra pair of glasses.	
<input type="checkbox"/> A battery-powered flashlight and plenty of extra batteries.	
<input type="checkbox"/> Credit cards and cash.	
<input type="checkbox"/> A list of family physicians	
<input type="checkbox"/> An extra set of car keys.	
<input type="checkbox"/> A list of important family information; the style and serial number of medical devices such as pacemakers.	
<input type="checkbox"/> Special items for infants, elderly or disabled family members.	
HOME HAZARD HUNT	
In a disaster, ordinary items in the home can cause injury and damage. Anything that can move, fall, break or cause a fire is a potential hazard.	
<input type="checkbox"/> Repair defective electrical wiring and leaky gas connections.	
<input type="checkbox"/> Fasten shelves securely and brace overhead light fixtures.	
<input type="checkbox"/> Place large, heavy objects on lower shelves.	
<input type="checkbox"/> Hang pictures and mirrors away from beds.	
<input type="checkbox"/> Strap water heater to wall studs.	
<input type="checkbox"/> Repair cracks in ceilings or foundations.	
<input type="checkbox"/> Store weed killers, pesticides and flammable products away from heat sources.	
<input type="checkbox"/> Place oily polishing rags or water in covered metal cans.	
<input type="checkbox"/> Clean and repair chimneys, flue pipes, vent connectors and gas vents.	

Emergency Preparedness Checklist

Emergency Preparedness Checklist (2 of 2)

SUPPLY OR DESCRIPTION	DUE DATE
IF YOU NEED TO EVACUATE	
<input type="checkbox"/> Listen to a battery powered radio for the location of emergency shelters. Follow instructions of local officials.	
<input type="checkbox"/> Wear protective clothing and sturdy shoes.	
<input type="checkbox"/> Take your Disaster Supplies Kit.	
<input type="checkbox"/> Lock your house.	
<input type="checkbox"/> Use travel routes specified by local officials	
IF YOU NEED TO EVACUATE AND YOU ARE <u>SURE</u> YOU HAVE TIME	
<input type="checkbox"/> Shut off water, gas, and electricity, if instructed to do so.	
<input type="checkbox"/> Let other know when you left and where you are going.	
<input type="checkbox"/> Make arrangements for pets. Animals may not be allowed in public shelters. Instruct household members to turn on the radio for emergency information.	
FIRE SAFETY	
<input type="checkbox"/> Plan two escape routes out of each room.	
<input type="checkbox"/> Practice fire drills at least twice a year. 1st test: / /12 2nd test: / /12	
<input type="checkbox"/> Teach family members to stay low to the ground when escaping from a fire.	
<input type="checkbox"/> Teach family members never to open doors that are hot. In a fire, feel the bottom of the door with the palm of your hand. If it is hot, do not open the door. Find another way out.	
<input type="checkbox"/> Install smoke detectors on every level of your home. Clean and test them at least once a month. Change batteries at least once a year.	
<input type="checkbox"/> Keep a whistle in each bedroom to awaken household in case of fire.	
<input type="checkbox"/> Check electrical outlets. Do not overload outlets.	
<input type="checkbox"/> Purchase and learn how to use a fire extinguisher (5 lb., A-B-C type)	
<input type="checkbox"/> Have a collapsible ladder on each upper floor of your house.	
SOCIAL MEDIA RESOURCES	



@NWSLosAngeles
@ReadydotGov



www.facebook.com/FEMA
www.facebook.com/redcross



www.youtube.com/user/FEMA
www.youtube.com/user/AmRedCross



FEMA

Federal Emergency Management Agency
www.fema.gov



American Red Cross

American Red Cross
www.redcross.org



Emergency Evacuation Supply List

EMERGENCY EVACUATION Supply List

Think about the specific ongoing needs of your own household, and your ability to carry these items to the designated evacuation area.

Backpack - or - Rolling Suitcase

Food and Water

- 6 4-oz water pouches/person
- Water purification tablets
- Canteen w/water filter
- 12 Meals/person, such as:
 - 3000-caloric food bars
 - MREs
 - Freeze dried meals
 - Canned goods
- Can opener
- Pet food and bowl
- Extra leash

Comfort and Sanitation

- Waterproof ground cloth
- Space blanket
- Hand warmers (heat packs)
- Warm socks
- Wool watch-type cap
- Boots or sturdy shoes
- Plastic rain pants & jacket
- Toothbrush & toothpaste
- Hotel-size soap bars
- Baby wipes (travel size)
- Feminine pads (also useful for first aid)
- Toilet paper
- Plastic garbage bags

Items Specific To My Household's Needs

- _____
- _____
- _____
- _____

First Aid and Medications

- First aid kit
- EMT shears
- Pain relievers
- Extra prescription medications
- Eyeglasses, hearing aid batteries
- Hand sanitizer

Equipment

- Swiss Army knife or Leatherman tool
- Fixed-blade knife with sheath
- Lighting
 - Flashlight w/ extra batteries
 - Hand crank flashlight
 - Cyalume light sticks
- Leather-palm gloves
- Duct tape
- 50-feet of light rope
- AM-FM radio (hand crank)
- Waterproof matches
- Plastic spoons
- Metal cup

Miscellaneous

- Copies of important documents
- Extra house and car keys
- List of contact names & numbers
- Playing cards
- Cash - small denominations and coins

**PREPARING AHEAD OF TIME IS THE
BEST WAY TO ENSURE YOUR
FAMILY'S SAFETY - AND COMFORT!**

- Consider also keeping a first aid kit and emergency supplies in each vehicle and at your place of employment.
- Review your supplies twice a year (when you change your clocks) to rotate out expired food, medications, and batteries. Adjust your kit to your household's changing needs.
- Have a good supply of non-perishable food and water on hand at home to 'camp out' in place until help arrives. See other side for shelter-in-place checklist.

Evacuation Checklist and Safety Tips



Medicine



Important Documents



At least one complete change of clothing



Toiletries



First Aid Kit

If you're living in a place that gets flooded easily, it's best to have an **evacuation kit** ready. But what should be inside an evacuation kit?

HERE'S A SHORT CHECKLIST:
EMERGENCY EVACUATION CHECKLIST



Bottled Water



Cash



Food that doesn't need refrigeration or heating



FLOOD SAFETY TIPS



Always listen to the radio or watch the television for news updates



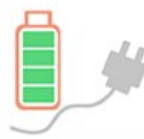
Know the emergency hotlines in your area.



Have your flashlights and/or your candles and matches ready, just in case power interruption occurs.



Move your important belongings to a higher level, and get to a higher ground.



Make sure that all your electronic gadgets are fully charged.

AD ASTRA the benildean yearbook

benildeanyearbook
benildeanYRBK

Infographic by: Zea Flores

SOURCE: www.pagasa.dost.gov.ph

Emergency Information

Emergency Information

In case of emergency
DIAL 911

Doctor _____	Phone _____
Hospital _____	Phone _____
Dentist _____	Phone _____
Vet _____	Phone _____
Pharmacy _____	Phone _____
Relative _____	Phone _____
Relative _____	Phone _____
Neighbor _____	Phone _____
Neighbor _____	Phone _____
Poison Control _____	Urgent care _____
Fire Dep. _____	Police _____
Gas _____	Other _____



Insurance Information

Medical Insurance	Home Insurance
Provider _____	Provider _____
Phone _____	Phone _____
Policy # _____	Policy # _____

Auto Insurance	Other Insurance
Provider _____	Provider _____
Phone _____	Phone _____
Policy # _____	Policy # _____



Other Information

Name _____	Phone _____
Name _____	Phone _____
Name _____	Phone _____
Name _____	Phone _____

Emergency Contacts

In Case of Emergency - Dial 911

San Luis Obispo County

- County Sheriff's Office 805-781-4550
- County Office of Emergency Services 805-781-5011
- Cal Fire/County Fire 805-543-4244

Santa Barbara County

- County Sheriff's Office 805-681-4100
- County Office of Emergency Services 805-681-5526
- County Fire 805-681-5500

Ventura County

- County Sheriff's Office 805-654-9511
- County Office of Emergency Services 805-654-2551
- County Fire 805-389-9710

Los Angeles County

- County Sheriff's Office 323-267-4800
- County Office of Emergency Services 323-980-2260
- County Fire 323-881-2411

During and After a Flood

During a Flood

Here's what you can do to stay safe during a flood:

- If flooding occurs, go to higher ground and avoid areas subject to flooding.
- Do not attempt to walk across flowing streams or drive through flooded roadways.
- If water rises in your home before you evacuate, go to the top floor, attic, or roof.
- Listen to a battery-operated radio for the latest storm information.
- Turn off all utilities at the main power switch and close the main gas valve if advised to do so.
- If you've come in contact with floodwaters, wash your hands with soap and disinfected water.

After a Flood

As soon as floodwater levels have dropped, it's time to start the recovery process. Here's what you can do to begin restoring your home.

- If your home has suffered damage, call your insurance agent to file a claim.
- Check for structural damage before re-entering your home to avoid being trapped in a building collapse.
- Take photos of any floodwater in your home and save any damaged personal property.
- Make a list of damaged or lost items and include their purchase date and value with receipts, and place with the inventory you took prior to the flood. Some damaged items may require disposal, so keep photographs of these items.
- Keep power off until an electrician has inspected your system for safety.
- Boil water for drinking and food preparation until authorities tell you that your water supply is safe.
- Prevent mold by removing wet contents immediately.
- Wear gloves and boots to clean and disinfect. Wet items should be cleaned with a pine-oil cleanser and bleach, completely dried, and monitored for several days for any fungal growth and odors.

Information from FloodSmart.gov.

After a Flood

File Your Claim

If you have experienced a flood, you can file your flood insurance claim by following these three steps:

STEP ONE:

After experiencing a flood, contact your agent or insurance company to file a claim. An adjuster should contact you within a few days of filing your claim. If you do not hear from an adjuster, you can contact your insurance agent or company again. Make sure you have the following information handy:

- The name of your insurance company
- Your policy number
- A telephone and/or email address where you can be reached at all times

STEP TWO:

Separate damaged from undamaged property. Your adjuster will need evidence of the damage to your home and possessions to prepare your repair estimate.

- Take photographs of all of the damaged property, including discarded objects, structural damage, and standing floodwater levels.
- Make a list of damaged or lost items and include their date of purchase, value, and receipts, if possible.
- Officials may require disposal of damaged items so, if possible, place flooded items outside of the home.

STEP THREE:

Your adjuster will provide you a Proof of Loss form for your official claim for damages. You'll need to file this claim with your insurance company within 60 days of the flood. This document substantiates the insurance claim and is required before the National Flood Insurance Program (NFIP) or insurance company can make payment.

You'll receive your claim payment after you and the insurer agree on the amount of damages and the insurer has your complete, accurate, and signed Proof of Loss form. If major catastrophic flooding occurs, it may take longer to process claims and make payments because of the sheer number of claims submitted.

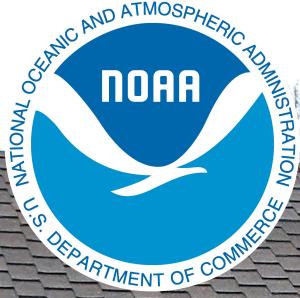
Information from FloodSmart.gov.

Returning Home

After the floodwaters have receded

- Return home only when officials have declared the area safe.
- Before entering your home, look outside for loose power lines, damaged gas lines, foundation cracks or other damage.
- Parts of your home may be collapsed or damaged. Approach entrances carefully. See if porch roofs and overhangs have all their supports.
- Watch for wild animals, especially poisonous snakes that may have come into your home with the floodwater.
- If you smell natural or propane gas or hear a hissing noise, leave immediately and call the fire department.
- If power lines are down outside your home, do not step in puddles or standing water.
- Keep children and pets away from hazardous sites and floodwater.
- Materials such as cleaning products, paint, batteries, contaminated fuel and damaged fuel containers are hazardous.
- Check with local authorities for assistance with disposal to avoid risk.
- During cleanup, wear protective clothing, including rubber gloves and rubber boots.
- Make sure your food and water are safe. Discard items that have come in contact with floodwater, including canned goods, water bottles, plastic utensils and baby bottle nipples. When in doubt, throw it out!
- Do not use water that could be contaminated to wash dishes, brush teeth, prepare food, wash hands, make ice or make baby formula.
- Contact your local or state public health department for specific recommendations for boiling or treating water in your area after a disaster as water may be contaminated.

Information from FloodSmart.gov.



Weather-Ready Nation

A blue banner with a white border. At the top, the text "FLOODING? BE SAFE!" is written in large, bold, white capital letters. Below this, the text "Turn Around Don't Drown" is written in yellow capital letters. On the left side of the banner, there is a small circular NOAA logo. The background of the banner shows a green vehicle, possibly a truck or bus, partially obscured by water and rocks.