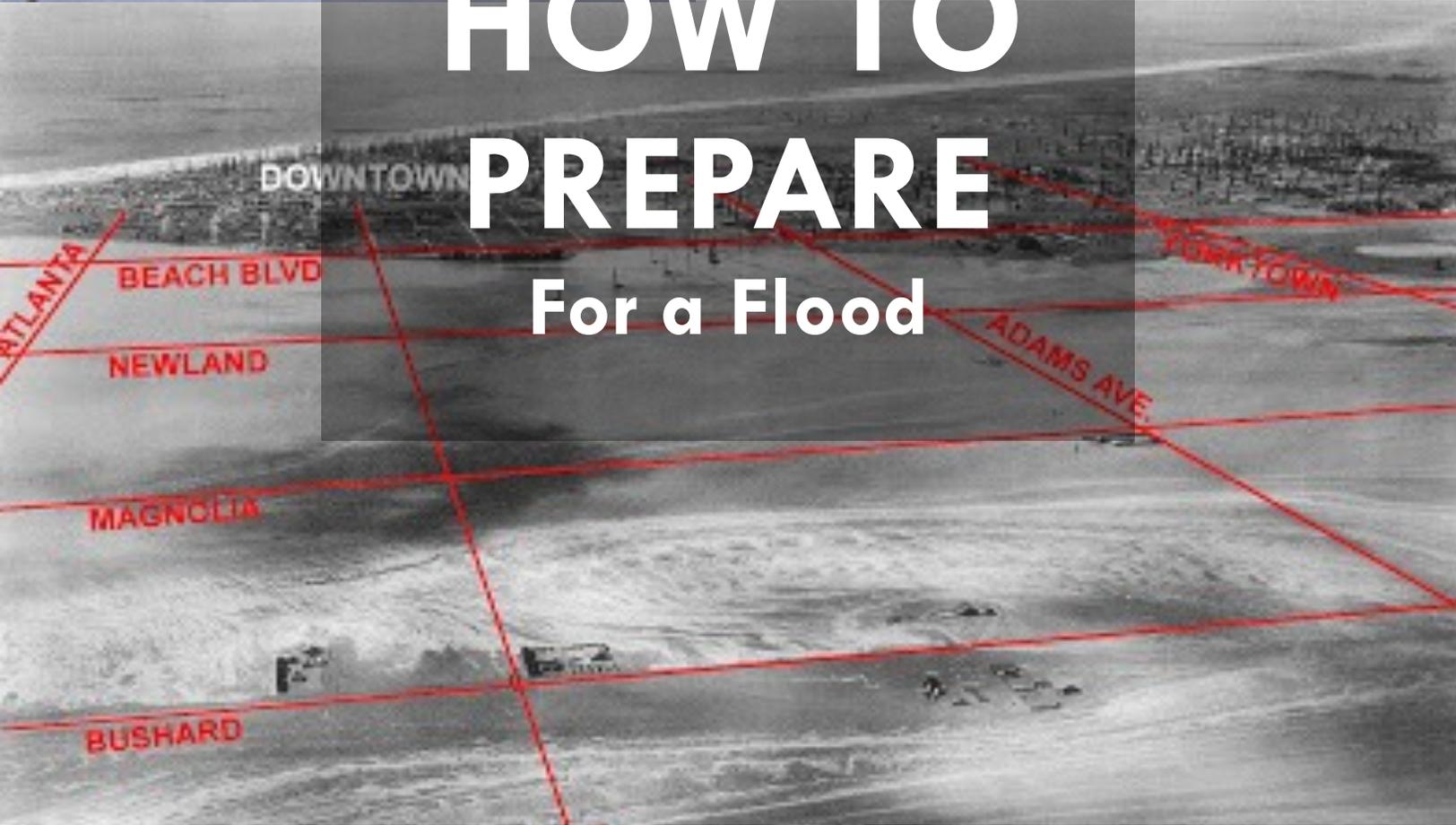


CITY OF HUNTINGTON BEACH

HOW TO PREPARE For a Flood



**KNOW
THE
RISK**

Flooding is the most common natural disaster in the United States and can happen anywhere. *How to Prepare for a Flood* explains how to protect yourself and your property, and details the steps to take now so that you can act quickly when you, your home, or your business is in danger.

WHAT

A flood occurs when a body of water rises to cover what is usually dry land. Floods have many causes, including heavy rains, spring snowmelt, tsunamis, hurricanes, coastal storms, and dam or levee failure. When flooding occurs, affected areas may sustain damage to structures and personal property, as well as severe damage to the environment in the form of soil erosion and deforestation and damage to utilities and transportation systems. Huntington Beach has a history of flooding and residents should be aware of the presence of local flood hazards.



PCH and Santa Ana River, 1930

WHEN

Huntington Beach weather conditions are consistent with coastal Southern California. The threat of severe winter storms is greatest during December through March. The threat from tropical storms is greatest in August through October as a result of hurricanes from Mexico during that timeframe. Heavy rains combined with high tide and large surf creates an increased potential for flooding. The first recorded flood occurred in 1825, when it changed the course of the Santa Ana river to its current location.

WHERE

In Huntington Beach, 75 percent of the city sits from 25 feet above to below sea level, which increases the vulnerability to flooding. Flooding may be caused by the Santa Ana River, East Garden Grove Wintersburg Channel, Talbert Channel, Huntington Beach Channel, or the Pacific Ocean. High tides may prevent flow from the Santa Ana River into the Pacific Ocean resulting in flooding in the south end of Huntington Beach.

For more information on Emergency Preparedness
visit: [HuntingtonBeachca.gov/PrepareHB](https://www.huntingtonbeachca.gov/PrepareHB)

HOW Flood hazards that potentially threaten Huntington Beach include inland runoff down the Santa Ana River, coastal storms and high surf, high tides, tsunami and dam failure. The city has a vast network of flood control facilities to prevent flooding, but heavy rains have the potential to exceed the capacity of the system and cause flooding throughout the city. During periods of heavy rains, water fills the storm drainage system to capacity.

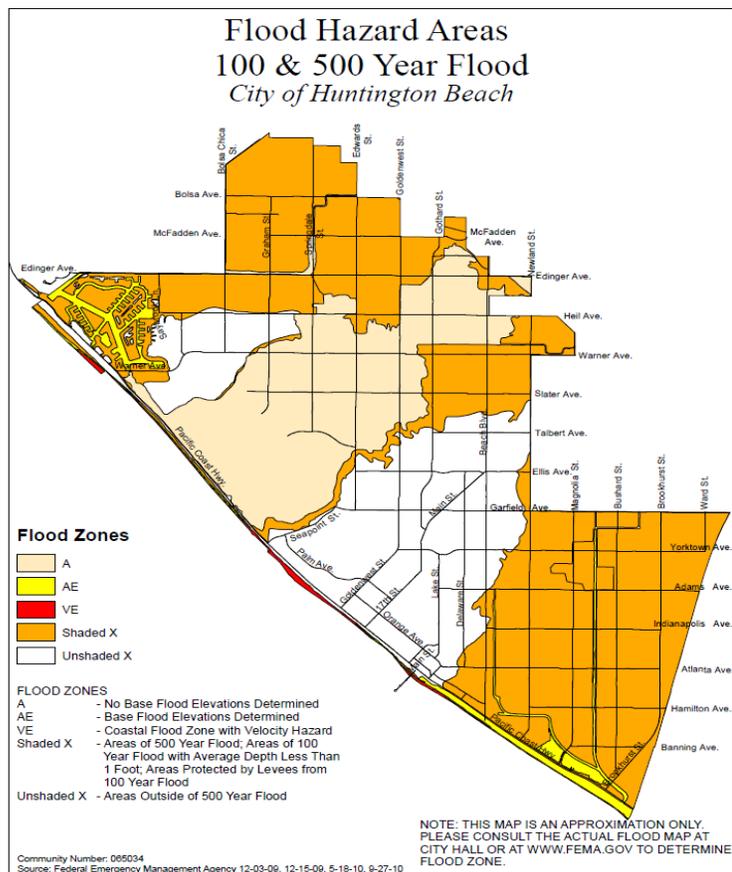
- Flooding can occur slowly as rain continues to fall for many days. This type of flooding, sometimes called a slow-onset flood, can take a week to develop.
- Rapid-onset floods occur more quickly, typically developing within hours or days and the water usually recedes within a few days.
- Some rapid-onset floods known as flash floods occur very quickly with little or no warning, such as during periods of extremely heavy rain or when levees, dams, or water systems break. Densely populated areas are at a high risk for flash floods. In urban areas, flash floods can fill underpasses, viaducts, parking structures, low roads, and basements.
- The strong winds of winter storms can push large amounts of seawater up onto the land, causing a storm surge. A storm surge combines with the ocean's tide to produce a storm-tide surge.

What is a 100-Year Flood?

A one-hundred-year flood is a flood event that has a 1% probability of occurring in any given year.

This does not mean this level of flooding only happens every 100 years.

Similarly, a 500 year flood is a 1-in-500 chance of happening in any given year.



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IMPACT The physical destruction caused by flooding depends on the speed and level of the water, the duration of the flood, terrain and soil conditions, and the built environment (e.g., buildings, roads, and bridges).

- Flooding can cause fatalities and serious injuries for people who are trapped or swept away by wading in, driving through, or boating across floodwaters.
- Transportation routes, power, water, gas, and other services may be disrupted.
- Commercial supplies and government support systems may be temporarily unavailable.
- Drinking water supplies and wells may become polluted.
- Floodwaters can cause erosion, which can damage roads, bridge structures, levees, and buildings with weak foundations, causing their collapse without warning. The floodwaters may carry the worn-away mud, rocks, and other sediment.
- Even a few inches of floodwater in a home can cause tens of thousands of dollars in damage.

PREPARE [Know your flood risk.](#) Learn whether you live, work, or travel through areas that are prone to flooding.

[Know how to stay informed.](#) Receiving timely information about weather conditions or other emergency events can make all the difference in knowing when to take action to be safe. Tune your radio to 107.9 KWVE and register for AlertOC at [AlertOC.com](#)

[Know different routes to evacuate your home and work.](#) The safest way to survive a flood is to evacuate the area if advised to leave. To ensure that you will be able to act quickly should the need arise, you need to plan ahead.

[Practice how you will communicate with family members.](#) In a dangerous situation, your first thoughts will be the safety of your family and friends. In case you are not together when authorities issue a flood watch or flood warning, practice how you will communicate with each other. Visit [ReadyOC.org](#)

[Store supplies so you can grab them quickly if you need to evacuate; know in advance what else you will need to take.](#) Take time now to make a list of the things you would need or want to take with you if you have to leave your home quickly. Store the basic emergency supplies in a emergency kit or other container. Visit [ReadyOC.org](#)

[Discuss what you have done to prepare with your family, friends, neighbors, and colleagues.](#) Talking about preparedness with others will help you think through your plans, share information about alerts and warnings, and share tips for protecting property. Talking about disasters and helping others prepare makes everyone safer.

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- EVACUATION**
- If advised to evacuate, do so immediately. Use travel routes recommended by local authorities.
 - Don't try to cross water flowing above your knees.
 - Evacuation is much simpler and safer before floodwaters become too deep for ordinary vehicles to drive through.
 - Listen 107.9 KWVE on a battery-operated radio or follow the official social media, for news, updates and evacuation instructions.
 - Follow recommended evacuation routes-shortcuts may be blocked.
 - Leave early enough to avoid being marooned by flooded roads.

CHECKLIST Check your property. Clear drains, rain gutters, fix leaky roofs and downspouts of debris.

Get a Rain Barrel. The City's Utilities Division is proud to present a Rain Water Barrel program for Huntington Beach residents, institutions and businesses. The barrels can be purchased at the discounted price of \$75 and each barrel holds up to 55 gallons of rain water. A small stock of rain barrels are available for residents and businesses at the Huntington Beach Utilities Yard, 19001 Huntington Street. Call 714.374.1503.

Get flood insurance. If you already have it, check your policy to make sure you have enough coverage-most policies don't cover flooding. Residents can identify their flood risk by entering their addresses at the government flood smart you can also get an estimate for annual premium costs.

A basic emergency supply kit could include the following recommended items:

- Water, one gallon of water per person per day for at least three days, for drinking and sanitation
- Food, at least a three-day supply of non-perishable food
- Battery-powered or hand crank radio and a NOAA Weather Radio with tone alert and extra batteries for both
- Flashlight and extra batteries
- First aid kit
- Whistle to signal for help
- Moist towelettes, garbage bags and plastic ties for personal sanitation
- Wrench or pliers to turn off utilities
- Manual can opener for food
- Local maps
- Cell phone with chargers, inverter or solar charger
- Extra prescription medications and glasses
- Change of clothing and wet weather gear.

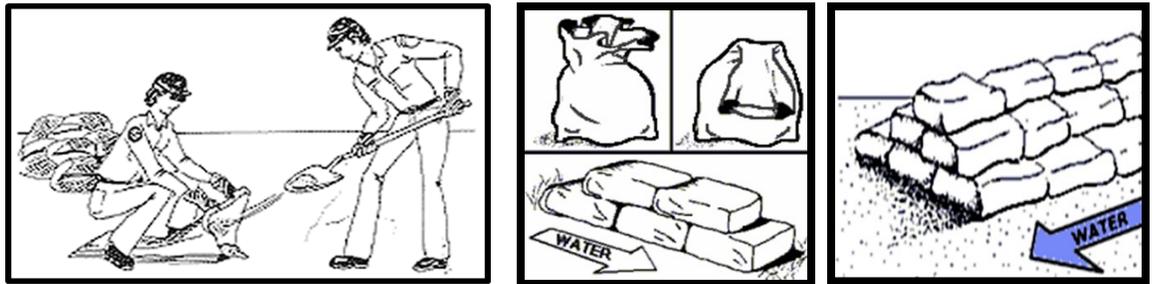
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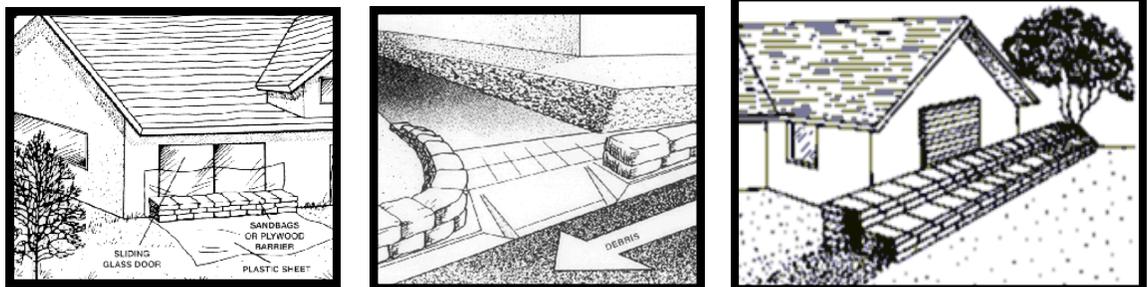
INSURANCE During the life of a 30-year mortgage there is a 26% chance of experiencing a flood. Homeowner's insurance policies do not cover damage from floods. Because Huntington Beach participates in the National Flood Insurance Program (NFIP) and Community Rating System (CRS), you can purchase a separate flood insurance policy at a reduced rate. This insurance is backed by the Federal government and is available to everyone, even for properties that have been flooded. There is a 30-day waiting period before NFIP coverage takes effect. If you don't have flood insurance, talk to your insurance agent. Some people have purchased flood insurance because it was required with their mortgage or home improvement loan. For more information visit FEMA.gov/NFIP

SANDBAGS Sandbags, when properly filled and placed, can redirect water and debris away from your property.

- Filling sandbags is a two-person task.
- Do not fill bags more than half full.
- Clear any debris from the area where the bags are to be placed.
- If possible, put a large sheet of heavy-duty plastic between the sandbags and the wall of your house.



- Place the bags lengthways, tucking the open end under the filled half of the bag and position it pointing into the direction of water flow.
- Place bags in layers. Like a brick wall, stagger the second layer, stamping each bag before placing the other.



For more information on Emergency Preparedness visit:
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TIPS DRIVING IN FLOODED STREETS

- Do not drive where water is covering the road. You can be stranded or trapped. Also, parts of the road may be washed out. [Turn Around, Don't Drown](#)
- Do not try to cross waters of unknown depth. The water may be much deeper than it looks. Avoid dips and low spots.
- If your car stalls in a flooded area, abandon it as soon as possible. Floodwater can rise rapidly and sweep a car and its occupants away.

AFTER A FLOOD

- Return home when authorities say it is safe.
- Let qualified specialists inspect your home and make repairs to structural damage and utility breaks before you re-enter.
- When inspecting your home for the first time, use a flashlight, not a torch or lantern. Sniff for gas leaks.
- Wear rubber-soled shoes and rubber gloves in case of severed electrical lines.
- Don't turn on electrical switches
- Check electrical circuits only when electricity has been shut off.
- Don't use flooded electrical appliances until they have been repaired.
- Don't drink municipal water until the health department has declared it safe.

WHAT TO ASK YOUR INSURANCE AGENT

- Do I have flood insurance?
- Do I qualify for a preferred risk policy?
- How much flood insurance should I purchase?
- How much contents coverage should I purchase?
- Should I consider a three-year policy to reduce my premiums?
- For more information about the National Flood Insurance Program's Preferred-Risk policy, ask your insurance agent or call the NFIP's toll-free number, 1-800-427-9662.

WEB RESOURCES

- Website: www.huntingtonbeachca.gov
- Facebook – City of Huntington Beach Public Information Office/Huntington Beach Police Department
- Twitter – [@cityofHBPIO](#), [@hbpd PIO](#), [@NWSSanDiego](#)
- www.redcross.org
- www.readyoc.org
- www.FEMA.gov

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SANDBAGS

FREE

To Huntington Beach & Sunset Beach Residents

Identification Required – Please Bring ID/Driver License & Current Utility Bill

City of Huntington Beach Corporate Yard

17371 Gothard Street

7:30 a.m. - 4 p.m. Monday-Friday

(714) 960-8861

Days/Hours/Location may be adjusted during extreme weather conditions

Bags are for residents only — No businesses — Limit 20 bags

Bring a shovel and be prepared to fill your own sandbags

Elderly or disabled residents call CERT Message Line at (714) 536-5974



PREPARED BY

City of Huntington Beach

Emergency Management & Homeland Security Office

HuntingtonBeachca.gov/PrepareHB

(714) 374-1565



CLASS 1

