

# ARE YOU PREPARED FOR A FLOOD IN YOUR NEIGHBORHOOD?

# WHERE WILL IT FLOOD IN SANTA CRUZ

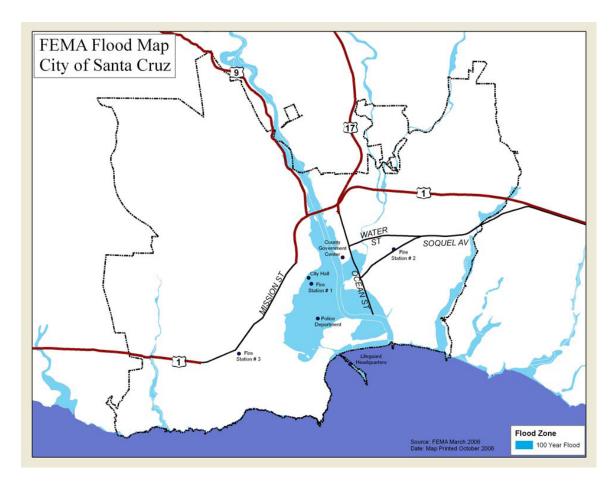
Within the City of Santa Cruz there are several areas subject to flooding. The San Lorenzo River runs through the downtown corridor and the majority of the downtown area is in the San Lorenzo floodplain. The San Lorenzo River also runs along the edge of the Harvey West Commercial—Industrial area including the new Tannery Arts Center and its associated housing.

Flooding along the coast of Santa Cruz may occur with the simultaneous occurrence of large waves and storm swells during the winter. Storm centers from the southwest produce the type of storm pattern most commonly responsible for the majority of serious coastline flooding. The strong winds combined with high tides that create storm surges are also accompanied by heavy rains. When storms occur simultaneously with high tides, flood conditions including flooding at the mouth of the San Lorenzo River are exacerbated.

There are several smaller creeks in the City that are subject to periodic flooding. Flooding is a hazard on the lower reaches of Moore Creek where only shallow stream channels are present, the lower portion of Arana Gulch, north of Santa Cruz Yacht Harbor, and along portions of Branciforte and Carbonera creeks. In these areas there is minimal impact on public structures and facilities and only a few residential structures are within these flood zones.



Downtown 1955 Flood



# WHAT IS THE STATUS OF MY PROPERTY

The FEMA Flood Insurance Rate Map (FIRM) is an official map of a community for which the Federal Emergency Management Agency (FEMA) has delineated the Special Flood Hazard Area (SFHA) and the risk premium zones applicable to the community. All known areas of the City subject to natural flooding hazards have been designated and mapped by the (FEMA), such as the 100 year floodplain boundaries which appear on FEMA's Flood Insurance Rate Maps.

The City Planning and Community Development Department has developed an aerial photo which displays flood elevations from FEMA maps and additionally provides information concerning the flood insurance zone designations of these properties. This information is available at the Planning and Community Development Department, Room 206, City Hall Annex, 809 Center Street, Santa Cruz, CA. 95060. They are open from 7:30 AM to 12:00 PM, Monday through Thursday or where appropriate by phone at 420-5100. This information is also available directly from FEMA at this website: https://msc.fema.gov/portal

## HOW SHOULD I PROTECT MY PROPERTY

Flooding is not covered by a standard homeowner's insurance policy. A separate flood insurance policy is required to cover damages incurred by flooding. Coverage is available for the building itself as well as for the contents of the building. The City of Santa Cruz participates in the National Flood Insurance Program (NFIP) that makes available federally backed flood insurance for all structures, whether or not they are located within the floodplain. Note that there is a 30-day waiting period before coverage goes into effect. Contact your insurance agency for more information. Flood insurance information is also available in Santa Cruz Public Libraries or online from the NFIP at: www.fema.gov/national-flood-insurance-program

- MAINTAIN DRAINAGE CHANNELS AND PIPES FREE OF OBSTRUCTION AND DEBRIS The City of Santa Cruz regularly cleans City storm drain pipes and street inlets to keep trash and pollutants from reaching our waterways and beaches. The City has 50 miles of storm drain pipes and over 1,000 storm water inlets. The schedule and specific stormwater maintenance activities are listed in the City's Stormwater Management Plan, interested persons can learn more about this important work on line at:

www.cityofsantacruz.com/government/city-departments/public-works/stormwater/stormwater-management-plan

City residents who live next to privately owned creeks and other waterways can also assist in insuring these waterways have a free flow of water. To assist in these activities the City has adopted a City-wide Creeks and Wetlands Management Plan, information is available on this plan at:

 $\frac{www.cityofsantacruz.com/government/city-departments/planning-and-community-development-2/area-plans-planning-documents-projects/city-wide-creeks-and-wetlands-management-plan}$ 

One other important consideration, the City Municipal Code Section 16.19.090 prohibits the discharge of pollutants, litter or other refuse into the City's storm drains, creeks and other waterways. Such dumping can have devastating impacts on water quality in addition to causing flooding. To report obstructions or illegal dumping, or for questions regarding the stormwater drainage system maintenance, please contact the City Public Works Department at (831) 420-5160.

#### - PROTECT YOUR PROPERTY FROM THE HAZARDS OF FLOODING AND WIND

Various methods may be used to minimize flood damage. If the floor level of your property is lower than the "Base Flood Elevation" (elevation of the 100-year flood, based on the FEMA maps), consider elevating your structure, if possible. While much of the City's flood hazard area is in the FEMA A-99 Flood Zone and does not require you may wish to consider this option as an added precaution. In areas which are not in the A-99 Zone all living areas in a home, must be elevated above the FEMA Base Flood Elevation.

Brochures discussing flood proofing and other mitigation measures are available in City of Santa Cruz Public Libraries and more extensive information is available at the FEMA website: <a href="http://www.fema.gov/library/viewRecord.do?id=3515">http://www.fema.gov/library/viewRecord.do?id=3515</a>

If a flood is imminent, property can be protected by sandbagging areas subject to the entry of water into living spaces. The City of Santa Cruz Public Works Department has a sandbag distribution program; during emergencies residents should contact the Public Works Department at (831) 420-5530. The details of this program are available at: <a href="https://www.cityofsantacruz.com/government/city-departments/public-works/emergency-storm-preparation">www.cityofsantacruz.com/government/city-departments/public-works/emergency-storm-preparation</a>

Valuables and furniture may also be moved to higher areas of the dwelling to minimize damages. Attaching plywood or specially made panels over windows and patio doors may help protect against high wind damages associated with severe winter storms.

During storm events a live stream of storm information will be available on the City of Santa Cruz: www.facebook.com/CityofSantaCruz/

- MEET IMPROVEMENT REQUIREMENTS In all areas of the City not in the A-99 Flood Zone the National Flood Insurance Program requires that if the cost of reconstruction, additions, or other improvements to a building equals or exceeds 50% of the building's market value, then the building must meet the same construction requirements as a new building. Substantially damaged buildings must also be brought up to the same standards. For example, a residence damaged so that the cost of repairs equals or exceeds 50% of the building's value before it was damaged must be elevated above the base flood elevation. For more information on this subject contact the City's Building Inspections Division at (831) 420-5120. Only a relatively small portion of the City is affected by this requirement due to the ongoing work of the Army Corps of Engineers to improve the San Lorenzo River Flood Control Project.
- MEET PERMITTING REQUIREMENTS All development within the city requires a permit. Always check and fulfill permitting requirements with the Building Inspections Division at (831) 420-5120 before you build on, alter, fill, or re-grade on any portion of your property and/or within any easement or right-of-way. Also, contact the above numbers above to report any suspected permitting violations.

## HOW SHOULD I PREPARE BEFORE THE STORM

The City of Santa Cruz provides a brochure with information on the steps to take before a flood event. This guide should be printed and made a part of your emergency supplies. This guide is at: <a href="https://www.cityofsantacruz.com/home/showdocument?id=46575">www.cityofsantacruz.com/home/showdocument?id=46575</a>

Here are some excerpts from the guide as a handy starting point.

- STORE SUPPLIES AT WORK, HOME, AND CAR IN HANDY LOCATIONS

- ✓ First aid kit and essential medicines
- ✓ Food and water (packaged, dried, canned, no cook, baby food and food for special diets)
- ✓ Non-electric can opener
- ✓ Portable radio, flashlights, and spare batteries (stored in watertight plastic bag)
- ✓ Keep your car fueled if electric power is cut off, filling stations may not be able to operate
- ✓ Keep sandbags, plywood, plastic sheeting, lumber and other emergency building materials handy for waterproofing
- ✓ Cash and credit cards
- ✓ Keep wrenches/tools handy to shut off gas and water
- ✓ Sturdy shoes
- ✓ Know safe routes from your home or office to high, safe ground.
- ✓ Teach all family members how and when to turn off gas, electricity, and water.
- ✓ Winterize your house, barn, shed or any other structure that may provide shelter for your family, neighbors, livestock or equipment.
- ✓ Install storm shutters, doors and windows.
- ✓ Clear rain gutters.
- ✓ Repair roof leaks.

## - DEVELOP AN EMERGENCY COMMUNICATION PLAN

- ✓ In case family members are separated from one another during floods or flash floods (a real possibility during the day when adults are at work and children are at school), have a plan for getting back together.
- ✓ Ask an out-of-state relative or friend to serve as the "family contact."
- ✓ After a disaster, it's often easier to call long distance.
- ✓ Make sure everyone in the family knows the name, address, and phone number of the contact person.
- ✓ Make sure that all family members know what to do after a flood or flash flood.
- ✓ Teach children how and when to call 911, police, fire department, and which radio station to tune to for emergency information.
- ✓ Know ahead of time what you can do to help elderly or disabled friends, neighbors or employees.
- ✓ If you think you might want to volunteer in case of a disaster, now is the time to let voluntary organizations or the emergency services office know beforehand.

# WHAT SHOULD I DO DURING A FLOOD

The City of Santa Cruz provides a brochure with information on actions you should take during a flood event. This guide should be printed and made a part of your emergency supplies. This guide is at: <a href="https://www.cityofsantacruz.com/home/showdocument?id=46575">www.cityofsantacruz.com/home/showdocument?id=46575</a>

Here are few simple excerpts from the guide as a handy starting point.

- WARNINGS – Information on coming winter storms and the threat of flooding will be issued by the National Weather Service and the County of Santa Cruz Emergency Operations Center. These warnings will come in the form of announcements on local radio stations, (KSCO AM 1080), NOAA weather alerts and other news outlets. For those that have registered warnings will be issued via reverse 911 calls to their cell phones and other similar warning to your home land line phone. The City of Santa Cruz is exploring other means of warning including Twitter feeds and similar internet warnings. Whatever the case stay alert as a winter storm approaches. To register for a reverse 911 call in times of emergency go to this web site: <a href="www.scr911.org/">www.scr911.org/</a>

When you hear this... It means...

- > "winter storm watch" Be alert, a storm is likely.
- > "winter storm warning" Take action, the storm is in or entering the area.
- ➤ "winter weather advisory" Winter conditions are expected to cause significant inconveniences and may be hazardous, especially to motorists.
- > "frost/freeze warning" Below freezing temperatures are expected and may cause
- damage to plants, crops, or fruit trees.
- > "flash flood watch" or Be alert to signs of flash flooding and be ready to evacuate on
- > "flood watch" a moment's notice.
- ➤ "flash flood warning" A flash flood is imminent act quickly to save yourself because you may have only seconds.
- > "flood warning" Flooding has been reported or is imminent, take precautions

# - DURING THE FLOOD

- Avoid low-lying areas subject to sudden flooding, such as underpasses.
- ➤ Do not try to walk across running water more than 6 inches deep. Even 6 inches of rapidly running water can sweep you off your feet.
- ➤ Do not "sightsee" in flooded areas.
- > Do not try to enter areas blocked off by local authorities.
- Avoid unnecessary trips. If you must travel during the storm, dress in warm, loose layers of clothing.
- Advise others of your destination.
- ➤ Use the telephone *only* for family emergency needs or to report dangerous conditions.
- Tune to local radio or television stations for emergency information and instructions from local authorities.

# IF INDOORS

- > Get your pre-assembled emergency supplies.
- ➤ If told to leave, do so immediately.

# IF OUTDOORS

- > Return to higher ground and stay there.
- > Avoid walking through any floodwaters.

## IF IN A CAR

- If you come to a flooded area, turn around and go another way.
- ➤ Do not drive into flooded areas. If your car stalls, abandon it *immediately* and return to higher ground.
- Many deaths have resulted from attempts to move stalled vehicles.

## IF ORDERED TO EVACUATE

- ➤ Monitor your local radio and/or TV station for information and emergency instructions.
- ➤ Have your emergency survival kit ready to go if told to evacuate.
- ➤ If you go outside for any reason, dress for the season and expected conditions: Outer garments should be tightly woven and water-repellent. Wear sturdy, waterproof boots in flooding conditions.
- ➤ If advised to evacuate, tell others where you are going, then leave immediately, following routes designated by local officials and if none seek higher ground and then available shelter.

## WHAT SHOULD I DO AFTER A FLOOD

## - IMMEDIATE ACTIONS WHEN ENTERING YOUR HOME

- ✓ When entering buildings, use extreme caution.
- ✓ Following an evacuation, don't return home until authorities indicate it is safe to do so
- ✓ Use flashlights *not* lanterns, matches or candles to examine buildings
- ✓ Stay out of buildings if flood waters remain around the building
- ✓ Inspect foundations for cracks or other damage
- ✓ Examine walls, floors, doors, and windows to make sure that the building is not in danger of collapsing
- ✓ Remaining flood waters may be contaminated from broken sewer lines or other sources
- ✓ Wear sturdy work boots and gloves
- ✓ Use a stick to poke through debris
- ✓ Watch for loose plaster and ceilings that could fall
- ✓ Take pictures of the damage both to the house and its contents for insurance claims

# - IMMEDIATE ACTIONS WITH YOUR UTILITIES

**Do not turn gas back on by yourself.** If you turn off the gas for any reason, it must be turned back on by a professional. Call and wait for utility crews.

- ✓ Check for gas leaks. If you smell gas or hear blowing or hissing noises, open a window and quickly leave the building. Call PG&E
- ✓ Do not handle live electrical equipment in wet areas. If electrical equipment or appliances have been in contact with water, have them checked before use.

# Do not turn electricity back on if:

✓ You smell gas — electrical sparks can ignite gas vapors.

- ✓ Parts of your electrical system have been flooded (i.e., circuit breaker boxes, outlets, wires). Do not handle electric equipment in wet areas.
- ✓ Look for electrical system damage. If you see sparks or broken or frayed wires, or if you smell hot insulation, turn off the electricity at the main fuse box or circuit breaker.
- ✓ If you have to step in water to get to the fuse box or circuit breaker, call an electrician Avoid downed power lines and broken gas lines report them immediately to PG&E, the City Police or Fire department.
- ✓ Check for sewer and water line damage. If you suspect sewer lines are damaged, avoid using the toilets and call a plumber. If water pipes are damaged, contact the City Water Department and avoid drinking water from the tap
- ✓ Damaged sewage systems are health hazards.

## - HOW TO START REPAIRS

Select a contractor who is licensed in his trade. The City of Santa Cruz requires contractors to be licensed and/or registered with the State of California and to have a City Business License. They will also be able to produce receipts for their licenses. Only licensed electricians may perform electrical work, only licensed plumbers may perform plumbing work, only licensed gas contractors may work on a gas system, only licensed mechanical contractors may perform heating, ventilation and air conditioning work, and only licensed building contractors may perform building related work. Verify that contractors are licensed before signing or agreeing to any repair contracts. It is also recommended that you verify certification of liability and workman's compensation insurance. Complaints against licensed contractors may be referred to the appropriate licensing agency.

Require your contractors to obtain the proper permits for work being performed. Permits are required for any permanent improvement (including painting, roofing, siding, additions, alterations, etc.) to a structure and for site work such as grading, filling, etc. Permits are required even if a homeowner is doing the work himself.

Questions about permits or contractor licensing may be addressed to the City of Santa Cruz Building Inspections Division at (831) 420-5120.

#### - WHO TO CALL FOR ASSISTANCE

Threat to life and property	911
Sandbag distribution program	420-5530
Street flooding emergency	420-5530
Trees Down	420-6164
Disabled access to sandbags	420-5530
American Red Cross	462-2881
Pacific Gas & Electric	800-743-5000 (English)
	800-660-6789 (Spanish)
Water system emergency	420-5220

Sewer system emergency 420-6036 Telephone Company (Repair calls) 611 City Building Inspection Division 420-5120

# **BE PREARED IT PAYS**



Downtown Fire Station 1955 Flood

For more information about flood safety or the NFIP, please note the following:

 $\frac{www.cityofsantacruz.com/government/city-departments/public-works/emergency-storm-preparation}{}$ 

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

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

1-888-FLOOD29