**DRAINAGE SYSTEM MAINTENANCE**

The County of San Diego has a complex storm drainage system, public and private, composed of streets and gutters, catch basins, underground pipes, ditches, pump stations, and channels. This system is used to carry water away from homes and businesses into rivers and streams. It is important to consistently maintain this system so it can be used to full capacity. The County regularly inspects the public system and performs maintenance as needed. Please help us ensure the capacity of the entire system by maintaining the private system.

- Check the County’s Survey Records System to determine if there are private or public drainage facilities on your property. [https://srs.sandiego.gov](https://srs.sandiego.gov).
- Keep streams and other conveyances that carry rainfall runoff through your property free of obstructions and debris such as trees, tall bushes, and trash. A plugged or obstructed drain cannot carry water and could cause flooding.
- Never dump or throw anything into the streets or storm drainage system. To do so is a violation of the County’s Watershed Protection Ordinance No. 10410.
- If you see trash or debris in the public drainage system, contact the County’s Public Works Field Operations staff at (619) 443-1260 weekdays or (877) 684-8000 evenings and weekends.

**FLOOD SAFETY**

To reduce your risk of injury during a flood:

- Do not attempt to cross a fast-flowing stream where water is above your ankles.
- Keep children away from rivers, ditches, culverts, and storm drains.
- Do not travel on flooded roads or through deep sections and never drive past a “Road Closed” barrier.
- If your home will be affected by flood waters, turn off all electric circuits at the fuse panel or disconnect switch. If your home will be affected by flood waters, turn off all electric circuits at the fuse panel or disconnect switch. If your home will be affected by flood waters, turn off all electric circuits at the fuse panel or disconnect switch. If your home will be affected by flood waters, turn off all electric circuits at the fuse panel or disconnect switch.
- Evacuate the flood hazard area in times of impending flood or when advised to do so by the Police or Fire Departments.
- Prepare a family plan that covers activities before, during, and after flood emergencies. [ready.sandiego.org](http://ready.sandiego.org).

**FLOODPLAIN DEVELOPMENT REGULATIONS AND PERMITTING**

Always check with the County Planning and Development Services and Public Works departments before you build, fill, alter, or grade on your property. All new developments, or any alterations, additions, or modifications to your building or land require a permit. Before you begin construction find out which permits and building standards apply by contacting the Planning and Development Services staff at the County’s Operation Center at 5510 Overland Avenue, San Diego, CA. (858) 694-2055.
THE FLOOD RISK IS REAL AND WIDESPREAD

San Diego is America’s most common natural disaster. There are an estimated 6,600 residential and commercial buildings subject to flooding within the unincorporated areas of San Diego County.

Even if you live miles away from water, you can still be a victim of flooding. In fact, nearly 1 in 4 flood insurance claims are paid on properties located more than 10 miles from the nearest ocean. That’s partly because it doesn’t take a major body of water, or even a major storm, to cause a flood. Anything from a broken water main, to unexpected rainfall, or even a major storm, can cause flooding. Homes in high-risk areas have a 26% chance of being damaged by a flood over the life of a 30-year mortgage.

LOCAL FLOOD HAZARDS

Seven principal watershed origins or traverse through the County of San Diego. They are the Santa Margarita, San Luis Rey, San Dieguito, San Diego, Sweetwater, Otay, and Tijuana Rivers. The county, along with the City of San Diego, has suffered from numerous major floods brought on by intense or prolonged rainfall and resulting in loss of life and millions of dollars in property damages. Over the past decade, major floods have occurred in Mission Valley, El Cajon, Ramona, and Borrego Springs. In addition to these major flood events, flooding has been known to occur in localized areas of the county during average seasonal rains. Flooding is also known to occur after major fire events, which the County of San Diego closely monitors.

The central and eastern portions of the County of San Diego are most susceptible to flash floods where moun- tains, canyons, and washes drain abruptly into the prevailing terrain. Avulaluvus fans are found in the Borrego Valley and require special construction methods to prevent building damage. These areas are known as “hot spots” and are identified in the County’s Multi-Jurisdictional Hazard Mitigation Plan. The Plan, which is available for public review at http://www.sandiego.gov/content/sdc/dpw/flood.html, provides information on the population and number of buildings subject to flood and dam failure inundation risks. The Plan also presents follow-up actions and recommendations for risk reduction.

FLOOD HAZARD MAPS

The flood hazard potential of your property can be found by clicking on the Flood Risk section of the SandyAlert homepage. If you do not have internet access, they provide a map online at FEMA’s website (https://www.fema.gov/flood-maps) at http://www.sandiego.gov/content/sdc/dpw/flood.html, which can be accessed directly and often have interactive features, such as floodplains, base flood elevations, and regulatory base flood elevations.

A flash flood is caused by excessive rainfall in a short period of time, generally less than 6 hours. FLASH FLOOD WATCH means that flash flooding is possible within the watch area. FLASH FLOOD WARNING means that flash flooding is imminent in the expected warning area and evacuation may be advisable. When a flash flood warning is issued you should take the following actions: Don’t wait until it’s too late. A policy takes 30 days from application to effective date of coverage. For more information, call your agent or the NFIP Help Center at: 1-877-336-2627 or visit https://www.floodsmart.gov.

THE STAFF OF THE FLOOD CONTROL COUNTER AT THE COUNTY OPERATIONS CENTER AT 5510 OVERLAND AVENUE IN SAN DIEGO ARE AVAILABLE TO ASSIST YOU IN PERSON OR BY TELEPHONE AT (858) 694-2055, 1-5. WITH THE FOLLOWING INFORMATION:

- Whether a property is located within an NFIP or County mapped flood zone.
- Flood insurance rating information such as FEMA flood zone and regulatory base flood elevation.
- FEMA Elevation Certificate, if available. The Elevation Certificate is an essential tool used to accurately rate flood insurance policies.
- Information on mandatory flood insurance purchase requirements.
- Regulatory provisions that may apply to your property.
- If available, whether or not the property has ever suffered any flood damage.

FLOOD WARNING

Flood warnings are disseminated by the Emergency Alert System through local radio and television stations (KOGO-AM 600, KFMB-FM 102.5, KFMB-FM 98.1, KFMB-FM 97.5, KFMB-FM 95.7, KFMB-FM 94.3, KFMB-FM 93.3, KFMB-FM 92.1, KFMB-FM 89.9, KFMB-FM 89.1, KFMB-FM 89.0, KFMB-FM 88.9). The County provides real-time information regarding high water, road closures, and evacuation routes. Warnings may also be issued to affected residents and businesses through the County’s AlertSanDiego Program, which allows residents to register their cell phones online to receive information during an emergency. The ALERT Flood Warning System in San Diego County consists of over 120 ALERT flood warning stations, which include 25 stream gages, 10 reservoir level sensors, 99 rainfall sensors, and 3 weather stations. The ALERT rainfall data is available at: https://www.sandiego.sce.com/home.php and https://www.weather.gov/sky/hydro. The County also maintains a webcam monitoring dry and wet floodprone areas of the County. To learn more, visit FEMA’s website at https://www.fema.gov/AlertSanDiego.

The “County of San Diego Watershed Protection, Stormwater Management, and Discharge Control Ordinance” requires property owners to control flow rates and velocities so that flows and lot sizes do not affect stormwater quality directly or indirectly. To register real-time flood information or to receive alerts, visit: https://sandiego.onerain.com.

The county’s Flood and Stormwater Services and the State of California have developed a system for forecasting and warning of flood events. This system, known as the ALERT Flood Warning System, provides real-time information regarding high water, road closures, and evacuation routes. Warnings may also be issued to affected residents and businesses through the County’s AlertSanDiego Program, which allows residents to register their cell phones online to receive information during an emergency. The ALERT Flood Warning System in San Diego County consists of over 120 ALERT flood warning stations, which include 25 stream gages, 10 reservoir level sensors, 99 rainfall sensors, and 3 weather stations. The ALERT rainfall data is available at: https://www.sandiego.sce.com/home.php and https://www.weather.gov/sky/hydro. The County also maintains a webcam monitoring dry and wet floodprone areas of the County. To learn more, visit FEMA’s website at https://www.fema.gov/AlertSanDiego.

FLOOD INSURANCE IS THE BEST PROTECTION

FEMA provides grants, in certain situations, for floodproofing and to protect life and property from future disaster damages. These grants are made to the state or local government rather than to the homeowner directly. Homeowners may have to meet a cost-share requirement. To learn more about these programs, visit FEMA’s website at https://www.fema.gov/grants/mitigation.

Being protected for a flood includes having flood insurance. With floods, there is usually some resulting loss or damage of property. Unfortunately, homeowners’ insurance policies do not cover flood damage. However, this coverage is available under the National Flood Insurance Program for participating communities such as the County of San Diego.

Many people think they don’t need flood insurance because federal disaster assistance will bail them out. But floods are not always declared a federal disaster; sometimes they are declared even when they are not. Flood insurance is immaterial even when they are. If you are not covered by the flood program, your money may not be paid back. You can cover your home’s structure for up to $250,000, and its contents for up to $100,000. For businesses, structural damage coverage is available up to $500,000, and up to $500,000 for contents.

In addition to the protection provided by flood insurance, you can protect your property through a variety of measures that can vary in complexity and cost. Property protection measures are used to modify buildings or other facilities subject to flood damage rather than to move floodwaters away. Raising a house above the flood level is the best property protection method short of moving the building entirely out of the floodplain. If a building cannot be removed from harm’s way, it can be protected on site. In areas of low flood threat, such as infrequent shallow flooding, barriers, and dry and general floodproofing, can be effective approaches. Other property protection measures you can take include:

- Raise your furnace, water heater, and electric panel to higher floors or the attic if they are in areas of your home that may be flooded.
- Install check valves in plumbing to prevent floodwater from backing up into the drains of your home. As a last resort, when floods threaten, use large corks or stoppers to plug shower, tubs, or basins.
- Seal walls in basements with waterproofing compounds to avoid seepage through cracks.
- Move furniture and any other valuables to higher floors.
- Keep materials like sandbags, plywood, plastic sheeting, and lumber handy for emergency waterproofing.