#### 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.sandiegocounty.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 obstruct-ed drain cannot carry water and could cause flooding.
- Never dump or throw anything into the streets or stormdrainage 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 Pubic 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 dip 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.
- 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. (readysandiego.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.

In addition to regular building permits, special regulations apply to construction in the floodplain and in floodways. No construction, including filling, is allowed in the mapped floodway without an engineering analysis that shows the project will not increase flood damage elsewhere. Any activity outside the floodplain but within a natural or engineered watercourse also requires a permit.

Elevation or floodproofing may be required if you plan to substantially improve your existing structure located within a FEMA or county identified flood zone (the cost of the improvement or add-on is 50% of the value of the existing structure). If your property is substantially damaged (50 percent of the value of the building), Federal regulations may require you to elevate or floodproof before you rebuild. The document titled, "Answers to Questions About Substantially Improved/Substantially Damaged Buildings" (FEMA 213 / August 2018) will help answer questions on this topic and can be obtained free by calling 1-800-480-2520 or visiting https://www.fema.gov.

To report illegal floodplain development or to verify that proper construction permits have been issued, contact the Department of Public Works Flood Control at (858) 495-5318. An inspector will investigate.

#### **IMPORTANT NUMBERS**

Local Disaster Response (Non-Emergency) 211

Department of Public Works
Flood Control (858) 495-5318
Stream Dumping Violations (888) 846-0800
Drainage System Maintenance
(Daytime) (619) 443-1260
(24 Hours) (877) 684-8000

County Office of Emergency Services (858) 565-3490

FEMA (800) 621-FEMA or (800) 621-3362

American Red Cross (858) 309-1200



County of San Diego Department of Public Works 5510 Overland Ave., Suite 410 San Diego, CA 92123

# IMPORTANT INFORMATION

## Protect Your Property Against Flooding



County of San Diego Department of Public Works 5510 Overland Avenue San Diego, CA 92123

#### THE FLOOD RISK IS REAL AND WIDESPREAD

Flooding 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 policies in low-to-moderate-risk areas. 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 sewer line to a slow moving rainstorm 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 watersheds originate 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 of San Diego has suffered from numerous major flood events 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 rainstorms. 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 mountain canyons, dry creek beds, and high deserts are the prevailing terrain. Alluvial fans are found in the Borrego Valley and require special construction methods to protect buildings. Specific areas of localized flooding (or "hot spots") are identified in the County's Multi-Jurisdictional Hazard Mitigation Plan. The Plan, which is available for public review at https://www.sandiegocounty.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 on the National Flood Insurance Program (NFIP) maps published by the Federal Emergency Management Agency (FEMA). These maps are available on-line at the FEMA Flood Map Store on FEMA's web site at www.msc.fema.gov.

In addition, the County's on-line geographic information source, SanGIS (www. sangis.org), also can be tailored to display FEMA designated flood hazards and locally known areas of flood or dam failure inundation risk. County riverine flood areas are depicted as A, AE, & AO Z-ones.

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) 495-5318 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-AM600, KFMB-AM760, KPBS-FM89.5, FOX6, KFBM8, KGTV10, KNSD, KSWB, KUSI, KBNT, XHAS, and KPBC) and by NOAA Weather Radio at 162.40 MHz. Online you can access forecasts, weather discussions, radar information, and satellite photos through the National Weather Service flood forecast site which can be viewed at http://weather.gov/sandiego.

The County provides real-time information regarding high water, road closures, and evacuation routes. Warnings may also be issued to affected residences and businesses through the 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 at: https://sandiego.onerain.com/home.php and https://www.weather.gov/sgx/hydro. The County also maintains webcams at selected low water crossings within the unincorporated area. View them here: http://www.sdcfcd.org/webcams.html

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 or has been reported in the warning area and evacuation may be advisable. When a flash flood warning is issued you may have 30-minutes or less to act. Therefore, you should pre-plan the actions you will take when a flood warning is issued.



The official site of the National Flood Insurance Program

## NATURAL AND BENEFICIAL FUNCTIONS OF FLOODPLAINS

When portions of floodplains are preserved or restored to their natural state, they provide many benefits to both human and natural systems. Open space resource areas adjacent to floodplain areas increase aesthetics and recreational opportunities; reduce the number and severity of floods; help handle stormwater run-off; and minimize non-point stormwater pollution. In accordance with policies stated in the County of San Diego General Plan, a large proportion of floodplains within the County are held for open space uses, such as parks and other recreational areas, many in a natural or beneficial state. The County's Multiple Species Conservation Program (MSCP) further ensures that the objectives of the General Plan are met. The MSCP goals are to maintain and enhance biological diversity in the region; to maintain viable populations of endangered, threatened, and key sensitive species and their habitats; and to protect water quality. Additional information about the County's MSCP can be found online at https://www.sandiegocounty.gov/pds/mscp/ or by emailing mscp@sdcounty.ca.gov.

The "County of San Diego Watershed Protection, Stormwater Management, and Discharge Control Ordinance" requires measures to control flow rates and velocities so that flows and flow patterns do not disrupt downstream wetlands or riparian habitats. Diversion of runoff to regional facilities is not allowed if it will deprive immediate downstream habitats of the minimum flows and over-bank flow events they need.

#### FLOOD INSURANCE: THE BEST PROTECTION

Being prepared 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 avail-able 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 and even when they are, aid is usually in the form of a loan, which must be paid back with interest. Flood insurance, on the other hand, pays for all covered losses, and unlike loans, that money doesn't have to 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 coverage is available up to \$500,000, and up to \$500,000 for contents.

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.

#### PROTECT YOUR PROPERTY

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 keep 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 wet 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 showers, 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.

To learn more, visit FEMA's https://www.fema.gov/emergency-managers/risk-management and the San Diego County website https://www.readysandiego.org.

FEMA provides grants, in certain situations, for property protection measures that reduce disaster losses and protect life and property from future disaster damages. Projects must provide a long-term solution to a problem. These grants are made to the state or local government rather than to the homeowner directly and often have a cost-share requirement. To learn more about these programs, visit FEMA's website at https://www.fema.gov/grants/mitigation.

