COUNTY OF LOS ANGELES HAZARDS AND THREATS
FLOODS, DEBRIS FLOWS, LANDSLIDES

TERMS and DEFINITIONS

Debris Basins:

Debris basins are key components of the Los Angeles County Flood Control District’s flood control system. Typically located at the mouths of canyons, debris basins capture sediment, gravel, boulders, and vegetative debris that are washed out of the canyons during storms but allow water to flow into the downstream storm drain system, thereby protecting drainage systems and communities in lower-lying watershed areas from possible flooding and property damage.

Flood Watch:

Flooding is possible. Tune into the National Oceanic Atmospheric Administration (NOAA) Weather Radio, commercial radio or television for information.

Flash Flood Watch

Flash flooding is possible. Be prepared to move to higher ground; listen to NOAA Weather Radio, commercial radio or television for information.

Flood Warning:

Flooding is occurring or will occur soon; if advised to evacuate, do so immediately.

Flash Flood Warning

A flash flood is occurring; seek higher ground immediately.

Before a Flood (To prepare for a flood)

- Avoid building in a flood-prone area unless you elevate and reinforce your home.
- Elevate the furnace, water heater, and electrical panel if susceptible to flooding.
- Install “check valves” in sewer traps to prevent floodwater from backing up into the drains of your home.
- Contact community officials to find out if they are planning to construct barriers (levees, beams, floodwalls) to stop floodwater from entering the homes in your area.
- Seal the walls in your basement with waterproofing compounds to avoid seepage.
During a Flood

If a flood is likely in your area, you should:

- Listen to the radio or television for information.
- Be aware that flash flooding can occur. If there is any possibility of a flash flood, move immediately to higher ground. Do not wait for instructions to move.
- Be aware of streams, drainage channels, canyons, and other areas known to flood suddenly. Flash floods can occur in these areas with or without such typical warnings as rain clouds or heavy rain.

If you must prepare to evacuate, you should do the following:

- Secure your home.
- If you have time, bring in outdoor furniture.
- Move essential items to an upper floor.
- Turn off utilities at the main switches or valves if instructed to do so.
- Disconnect electrical appliances.
- Do not touch electrical equipment if you are wet or standing in water.

If you have to leave your home, remember these evacuation tips:

- Do not walk through moving water. Six inches of moving water can make you fall. If you have to walk in water, walk where the water is not moving. Use a stick to check the firmness of the ground in front of you.
- Do not drive into flooded areas. If floodwaters rise around your car, abandon the car and move to higher ground if you can do so safely. You and the vehicle can be quickly swept away.

Driving Flood Facts

The following are important points to remember when driving in flood conditions:

- Six inches of water will reach the bottom of most passenger cars causing loss of control and possible stalling.
- A foot of water will float many vehicles.
- Two feet of rushing water can carry away most vehicles including sport utility vehicles (SUV’s) and pick-ups.
After a Flood

The following are recommended actions and/or guidelines for the period following a flood:

- Listen for news reports to learn whether the community's water supply is safe to drink.
- Avoid floodwaters; water may be contaminated by oil, gasoline, or raw sewage. Water may also be electrically charged from underground or downed power lines.
- Avoid moving water.
- Be aware of areas where floodwaters have receded. Roads may have weakened and could collapse under the weight of a car.
- Stay away from downed power lines, and report them to the power company.
- Return home only when authorities indicate it is safe.
- Stay out of any building if it is surrounded by floodwaters.
- Use extreme caution when entering buildings; there may be hidden damage, particularly in foundations.
- Service damaged septic tanks, cesspools, pits, and leaching systems as soon as possible. Damaged sewage systems are serious health hazards.
- Clean and disinfect everything that got wet. Mud left from floodwater can contain sewage and chemicals.

Landslide:

It is important for residents who live on steep hillsides and in canyons be prepared for landslides. Areas that do not have grass, trees, shrubs and plants, such as after a fire, and more likely to have landslides. This includes sliding, falling, and flowing soil, rock, mud, brush and trees, especially during or after heavy rains. Slow-moving landslides can cause significant property damage, but they usually do not cause injury or death.

Landslides are common in Los Angeles County. Late winter and early spring are the most common times for slides, with most of the documented slides in the County occur in January. Nearly all landslides in Los Angeles County result when excess water is involved, and the majority of landslides also involve human factors of some type.
Mudslide:

However, mudslides are much more dangerous. According to the California Geological Survey, mudslides can easily exceed speeds of 10 miles per hour and often flow at rates of more than 20 miles per hour. Because mudslides travel much faster than landslides, they can cause deaths, injuries and significant property damage.

Probability of a Slide Event:

The probability of a slide event rises after a wet, cold winter, especially if a freeze occurs in late winter and early spring. The ground becomes saturated over the winter, and then porous following a freeze, so a subsequent rain will penetrate the surface while the high water table will prevent the ground from absorbing it. The water increases the slope stress by adding weight and increasing pore pressure within the soil.