## Maintaining Stormwater Drainage Systems

Pollutants, such as trash, debris, mud or dirt can concentrate over time in storm drainage facilities such as catch basins, ditches, concrete V-ditches, and storm drains.

When a large storm event occurs, turbulent runoff can mobilize these pollutants and carry them to streets, storm drain systems, and receiving waters (i.e. rivers, lakes, and streams). In some cases, this run off can cause major flooding and property damage via mudslides and debris flows.

Most hillside loss problems are associated with water. Uncontrolled water from a broken pipe, septic tank, excess landscape watering, or wet weather cause the most damage. Wet weather is the principal cause of slope problems in California. *Maintenance of hillsides must be carried out by private property owners to assure continued safe operation*. The following is a list of "Do's" and "Don'ts" as a guide for homeowner maintenance of slopes and hillsides:

## <u>D0</u>

- 1. Check roof drains, gutters, and downspouts to be sure that they are clear.
- 2. Clear drainage ditches and check them frequently during the rainy season.
- 3. Check interceptor (brow) ditches at the top of slopes to be sure that these are clear and that water will not overflow the slope, causing erosion.
- 4. Be sure that all drain outlets and weep-holes (within walls) are open and clear of debris, vegetation, and other material which could block drainage in a storm.
- 5. Check for loose fill above and below your property if you live on a slope or terrace.
- 6. Limit water or stop altogether during the rainy season when little irrigation is required.
- 7. If slope landscaping must be altered, disturb the soil as little as possible and use drought resistant-type plants that require minimum irrigation.
- 8. Watch for wet spots on your property as these may be natural seeps or an indication of a broken water or sewer line.

## <u>DON'T</u>

- 1. DON'T over-irrigate slopes or leave a hose or sprinkler running unattended on or near a slope.
- 2. DON'T alter lot grading without competent advice. The man-made slopes on your lot were designed to carry away water runoff to a place where it can be safely distributed.
- 3. DON'T block or alter ditches which have been graded around your house or lot pad.
- 4. DON'T block or alter ditches or drains. If several homes rely on the same drainage facilities, it is a good idea to check with your neighbors.

- 5. DON'T permit water to collect or pond anywhere on your lot. This water will either seep into the ground, causing unwanted saturation, or will overflow onto slopes and begin erosion.
- 6. DON'T direct water over slopes as this tends to cause erosion.
- 7. DON'T connect roof drains, gutters, or downspouts to existing subsurface drains which may not have been designed for that purpose.
- 8. DON'T discharge surface water into septic tanks or leaching fields.
- 9. DON'T try to compact earth in trenches by flooding with water.

Your neighbor's slope, above or below your property, is as important to you as the slope that is within your own property lines. For this reason, it is highly recommended that you develop a cooperative relationship with your neighbor regarding hillside maintenance. Should conditions develop off your property which are undesirable from indications given above, necessary action by individual property owners should be taken to ensure that prompt remedial measures are taken.

For more information and guidance literature, please check the Riverside County Flood Control District website.

http://www.floodcontrol.co.riverside.ca.us/NPDES/SantaAnaWS.aspx#SAapp