

INTRODUCTION

The winter of 1996-1997, with its unusually heavy rainfall, emphasized the need to provide and maintain adequate drainage facilities for all types of property, private homes, business properties and undeveloped lots. Placer County has provided this pamphlet to guide and to assist property owners in avoiding drainage problems on their property, and help avert the creation of problems for their neighbors.

The purpose of this publication is to summarize the more important laws and rules pertaining to drainage of storm waters, which rules are of interest and concern to all property owners. This summary does not purport to include all details of the various laws, rules and Court decisions. A property owner with a specific problem should consult applicable laws, rules and decisions, and discuss such with the appropriate governmental agency involved, private counsel, or civil engineer. This summary is presented simply as a convenient, concise guide to the major rules of water drainage applicable to property owners.

RESPONSIBILITY

Many lots in urban areas are created by subdividers. Subject to the review of the City or County having jurisdiction, the subdivider's engineer designs roads, utilities and drainage systems which are then constructed. Generally, the drainage provided takes care of streets and replaces natural drainage facilities, such as streams and gullies, which may be disturbed by the development. Drainage of individual lots need not be provided by the subdivider. At the time an individual lot is sold, any drainage problems on the lot become the responsibility of the new owner. While the City or County will require the subdivider to take care of general, area-wide drainage, the degree to which drainage of individual lots is taken care of is largely up to the developer of the parcel in question.

In some cases the lot ownership passes to a builder before being sold to a new home owner. In this case, the lot drainage provided depends to a great extent on the thoroughness of the builder. The plans for homes are reviewed by the City or County for compliance with the International Building Code, or other local

ordinance; however, drainage is not necessarily included in this review.

In any case, after a home is purchased, the responsibility for drainage lies with the owner and not the subdivider, builder, City or County.

*****DRAINAGE LAW*****

Drainage law is complicated but the courts have made some general rulings of which the homeowner should be aware:

1. The downstream property owner is obligated to accept and make provision for those waters which are the natural flow from the land above.
2. The upstream property owner shall not concentrate water where it was not concentrated before without making proper provision for its dispersion without damage to the downstream property owner.
3. The upstream property owner may reasonably increase drainage runoff by paving or constructing other impervious surfaces, including buildings, without liability. The upstream property owner may not further increase drainage runoff by diversion of water which previously drained to another area.
4. No property owner shall block, or permit to be blocked, any drainage channel, ditch, or pipe. No property owner shall divert drainage water without properly providing for its dispersion.

PROBLEMS

Improper control of drainage can create many problems other than the obvious one of flooding. Uncontrolled surface drainage creates erosion of slopes and pollutes surface waters. The County Stormwater ordinance prohibits the discharge of sediment from your property.

Disposal of water into banks by sub-surface drains can create landslides. Improperly drained foundations can cause settlement and increase exposure to rot and structural damage. These, and other similar reasons, are good cause for treating drainage like any other regular maintenance problem around a house.

WET WEATHER MAINTENANCE OF HOMESITES

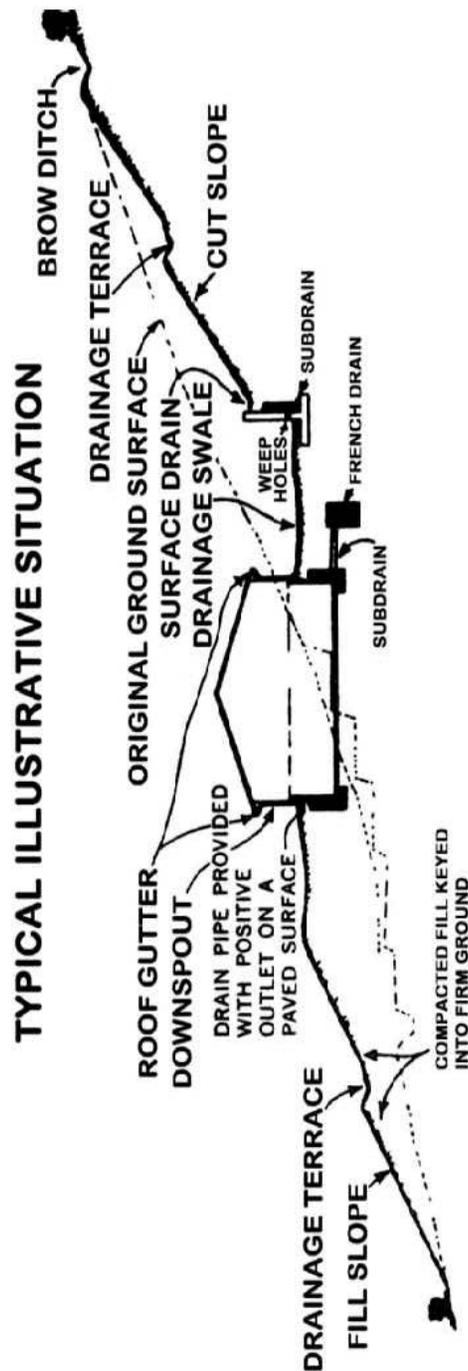
1. DO clear surface and terrace drains, catch basins and ditches and check them frequently during the rainy season, with a shovel, if necessary. Ask your neighbors to do likewise.
2. DO be sure that all drains have outlets. Under the right conditions, this can be tested simply on a dry day with a hose. If blockage is evident, you may have to use a drain auger.
3. DO keep drain openings, ditches, catchbasins, etc. clear of debris and other material which could block them in a storm.
4. DO check roof drains, gutters, and down spouts to be sure they are clear. Depending on your location, if you do not have roof gutters and down spouts, you may wish to install them because roofs and their wide, flat surfaces will shed tremendous quantities of water. Without gutters or other adequate drainage, water falling from the eaves ponds against foundation and basement walls.
5. DO check all drains and outlets at the top of slopes to be sure that they are clear and that water will not overflow the slope itself, causing erosion.
6. DO check for loose fill above and below your property if you live on a slope or terrace. Clean all interceptor ditches at tops and toes of slopes to remove dirt and debris.

DON'TS

1. DON'T block terrace drains, brow ditches, on slopes or at the tops of cut slopes on sloping ground. These are generally located on terraces and designed to carry runoff water to a place where it can be safely distributed. Generally, a little shovel work will remove any accumulation of dirt and other debris which clogs the drain. If several homes are located on the same terrace, it is a good idea to check with your neighbors. Water backed up on their property may eventually reach you. Water backed up on surface drains will tend to overflow and seep into the terraces, creating less stable slopes and possible slippage.
2. DON'T permit water to gather above or on the edge of slopes (ponding). Water gathering here

will tend to either seep into the ground, loosening fill or natural ground, or will overflow on the slope and begin erosion. Erosion may quickly destroy fill or natural ground.

3. DON'T connect roof drains, roof gutters, or down spouts to subdrains. Arrange them so that they will flow out onto a paved driveway or the street where the water may be dissipated over a wide surface. Subdrains are constructed to take care of ordinary sub-surface water and cannot handle the overload from roofs during a heavy rain. Overloading of the subdrains tends to weaken the foundation soil.
4. DON'T spill water over slopes, even where this may seem a good way to prevent ponding. This tends to develop erosion and, in the case of fill, can eat away carefully engineered and compacted land. Install pipes down the slope where necessary to carry drainage to a point of disposal.
5. DON'T drop loose fill over slopes. It is not compacted to the same strength as the slope itself and will tend to slide with heavy moisture. The sliding may clog terrace drains below or may cause additional damage in weakening the slope. If you live below a slope, try to be sure that loose fill is not dumped above it.
6. DON'T discharge extra water in French drains. French drains are sometimes used to get rid of run-off water when other ways are not readily available. Overloading such drains saturates ground and if located close to slopes, may cause slope failure in that vicinity.
7. DON'T let water gather against foundation, retaining walls and basement walls. These walls are built to withstand the ordinary moisture in the ground. If water is permitted to pond against them, it may seep through them causing dampness and leakage inside the basement, and sometimes will erode away beneath foundation walls and retaining walls. This can cause heavy structural damage.
8. DON'T block swales which have been graded around your house or the lot pad. These shallow ditches have been put there for the purpose of quickly removing water toward the driveway, street or other positive outlet. By all means, do not let water become ponded above slopes by blocked swales.



WATCH OUT for WATER

SIMPLE RULES AND SUGGESTIONS PERTAINING TO DRAINAGE OF STORM WATERS

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References:

Placer County Grading Ordinance (Article 15.48)

Placer County Stormwater Ordinance (Article 8.28)

Adapted from a publication by the City of Larkspur