Soil erosion can happen slowly, gradually washing away top soil, or it can happen quickly in heavy rain events. In either scenario, the land is stripped bare of valuable natural resources.

In an effort to help landowners protect their property, professional NRCS Conservationists developed erosion control practices for areas where trees have been removed. In this Homeowner’s Guide to Erosion Control, you will find common NRCS practices that can be implemented to protect your property and prevent mudslides. Expanded fact sheets are also available at: www.ca.nrcs.usda.gov/programs/ewp

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**Prevent Erosion**

It's easy to prevent erosion on your sloped property. **Now** just follow these instructions to stabilize your slopes.

### What Kind of SLOPES Do You Have?

**Take a look at your slopes. How steep they are will tell you what will work.**

Moderate slopes (less than 33%) have a good chance of success at controlling runoff using plant materials and mulch.

- Cover bare soils with mulch of bark chips, pine needles, wood chips, and even stones or river rock. Up to two inches of bark, wood chips or pine needles will not create a fire hazard.
- When landscaping, select plants for slope stabilization and use bubblers or drip emitters for irrigation. When watering season starts again, watch the length of time you water and the amount of water delivered. Make sure the plants get only what will soak in.

Slopes between 33% and 50% require special care.

- Plants (ornamental grasses, shrubs) and erosion control mats
- Rip Rap
- Greater than 50% Revegetation improbable

50% or “2:1” Revegetation success poor

33% or “3:1” Revegetation success fair

25% Revegetation success good

Less than 25% Revegetation success very good

Slopes over 50% will require structures or special techniques for stabilization.

#### Materials

- The materials needed are readily available and inexpensive and can be installed with normal household tools: sandbags, sand, lumber and plywood.

#### Battling MUDSLIDES & FLOODS

If you have removed vegetation, dead or dying trees from your property, you need to take defensive measures to protect against flooding and mudslides. When too much protective material is removed, soil is left bare and vulnerable to erosion. Defensive measures for your property can provide protection in the form of mulch, deflection walls, diversion ditches, and sandbag diversions.

- **Mulching**
  - A mulch consisting of two inches of wood chips, oak leaves and pine needles should be spread across burnt or baren areas of soil. This will:
    - help to protect and keep soil in place
    - increase water penetration
    - keep soil cool and maintain moisture
    - increase organic content of soil (you may want to add nitrogen if mulch is applied around existing vegetation, since the break down of mulch utilizes some nitrogen)

- **Protecting windows and doors**
  - In areas where mudslides are possible use plywood to board up windows and doors. Overlap windows, vents or doors at least three inches on each side. Secure plywood with four or more nails, screws or bolts.

- **Wooden deflector walls**
  - Use lumber for walls. Drive stakes to at least half their length into the ground for proper anchorage. Place deflectors on solid, level soil to prevent erosion. Earth packed behind the deflector will make it stronger. Contact your local NRCS office for more information.

- **Diversion ditches**
  - Dig a small ditch close to the upper edge of the property to slow water movement. Provide for the ditch to drain into a drainage device, street pavement or a well vegetated area.