Each day that you have bare soil exposed, ask:

- 1) Is it going to rain? Today? Tonight?
- 2) How will I stop sediment from washing onto the neighbor's property?
- 3) How will I keep mud from being tracked out onto the public road?
- 4) How will I keep sediment from washing into any stream or drainage area near my project?

You probably want a nice stand of grass on your yard...why not *seed and mulch early* in construction?

You most likely want a nice driveway...why not put down some gravel early in construction?

Calculate the total of your disturbed areas:

- 1) Dimensions of house (length x width) =
- 2) Yard area (cleared area around house) =
- 3) Septic area and drain field =
- 4) Driveway length and width...on this item you should calculate surface area and include the banks and ditch area =
- 5) Well, water lines and utility lines (on this item calculate staging area and lengths and widths on trenches) =
- 6) Other areas=

#### TOTAL SQUARE FOOTAGE =

1/2 acre equals 21,780 square feet. If your disturbed area equals or exceeds this area, you are required to obtain a Land-Disturbing Permit from the County.

Plan approval is required before you dig. Plan ahead and avoid violations and possible fines.

The sediment law provides for as much as \$5,000 per day per violation in civil penalties.

Contact Jackson County Permit Center for erosion control and land development advice at 828-586-7560 or call our Cashiers office at 828-745-6850.

#### RESIDENTIAL EROSION CONTROL

Often when people undertake a home building project, they don't know what is actually required for erosion and sediment control. The purpose behind this brochure is to give you the basic ideas of the sediment law and to provide some suggestions to help you stay in compliance and stabilize your site properly.

You can adequately control off-site tracking by installing and maintaining a gravel construction entrance. A properly installed silt fence along the lower side of the property can protect the neighbor and the creek. You may need a culvert under the driveway and a storm-water diversion ditch. In any case and for any situation the main objective is to *keep your mud on your property and establish ground cover quickly!* The best erosion control will always be ground cover. Sow grass ASAP and don't wait to put down gravel. The minimum you must do to protect the adjoining properties and natural resources from sediment damage, and establish ground cover quickly.

Home sites are often located along streams. Buffer zones are streamside areas requiring special protection from sediment damage. An undisturbed, vegetative buffer zone is required on many of our streams. More information about required buffer zone widths can be attained by contacting the Erosion Control office.

#### **Jackson County Permit Centers**

401 Grindstaff Cove Road, Sylva NC 28779 Phone (828) 586-7560 Fax (828) 586-7563

# RESIDENTIAL EROSION CONTROL



## CONTROL EROSION AND PREVENT SEDIMENT DAMAGE WHEN YOU BUILD A HOUSE



# RESIDENTIAL EROSION CONTROL PLANNING AND DESIGN

#### **UNDER 1/2 ACRE DISTURBED**

Most residential sites can successfully stay beneath the county's **permitting threshold of 1/2 acre**. If your site falls into this category you are still required to keep your sediment on your property, meet the ground cover requirements, and protect streams, springs and wetland areas.

\*NOTE: Need to fill out Land Development Form Located at the Jackson County Permit Center

# SUGGESTIONS FOR A SUCCESSFUL PROJECT

- Install and maintain a gravel construction entrance to prevent off-site tracking (*mud-slick*).
- Install and maintain silt fence on the lower edge of your property (protects springs, streams and neighboring properties).
- Provide a ground cover adequate to restrain erosion by 10 days after any phase of grading.
- Any site requiring a culvert will also require stabilized inlet and outlet protection.
- Any storm-water diversion ditches will require stabilization (permanent ground cover).

### 1/2 ACRE OR MORE DISTURBED

In some cases more than 1/2 acre will need to be disturbed to achieve your desired goal. In this case your requirements are the same as above <u>and</u> you are required to obtain an **Erosion Control Permit**.

To apply for the proper permit, visit the Jackson County Permit Center, Suite 145, in the Justice and Administration Building, or you can visit our Cashiers Office at 357 Frank Allen Road.

\*Any installed erosion control devices should be inspected and cleaned out after 1/2" of rainfall.

To see if a stream near you is classified as "trout waters", go to the state's web site for stream classification: <a href="https://ncdenr.maps.arcgis.com/apps/webappviewer/index.html?id=6e125ad7628f494694e259c80dd64265">https://ncdenr.maps.arcgis.com/apps/webappviewer/index.html?id=6e125ad7628f494694e259c80dd64265</a>

#### **BAD INSTALLATION**



An unsafe condition is created if you allow mud from your site to be tracked onto the public road. You may be held responsible if it causes an accident. An adequate gravel construction entrance can prevent a "mud-slick".



Silt fence that has been installed incorrectly or in an area of concentrated flow will fail. Silt fence works by reducing water flow and retaining sediment on site. Silt fencing should be reinforced.



In this photo it is obvious that no attempt to establish ground cover has been made. Ground cover is the best erosion control measure. Ground cover reduces the need for sediment control. Seed and mulch ASAP. It will rain.



Sites near a stream may require an undisturbed buffer zone. This photo shows a violation of county, state, and federal laws. Get permission before you dig in the creek. Stream culverts require permission from the Army Corps.



This **temporary** sediment trap needs an outlet spillway section constructed of stone to provide drainage for the pool. The inside face of the outlet section should be lined with gravel to slow the release of drainage water and improve efficiency.

You may need to contact a civil engineer to gain the best advice if you are developing on steep or sloping land.

You may benefit by having a CLEAR AGREEMENT with your grading contractor about exactly what will be done.

#### **GOOD INSTALLATION**



An adequate gravel construction entrance will be 2"-3" clean stone at least 6" deep and 12' wide. Loose BIG stone scrapes mud off tires. Small stone will "pack down" and doesn't work as well. Place stone where vehicles enter the highway.



Installing silt fence properly will require the filter fabric to be attached on the **uphill side of the post**. Silt fencing should be buried 4"-6" with **compacted** backfill. Silt fencing is recommended at the toe of the slope and along slope contours.



All ground cover requirements have been met here, not only with a **good vegetative cover**, but the **road surface** as well.



Trout streams and tributaries require special protection. All streams must have a buffer zone. The minimum "trout" buffer is 25 feet. Check with the erosion office for stream classifications.



Correctly constructed temporary sediment traps needs small stone across the face of the structure a minimum of 1 ft. thick to reduce drainage rate.

Multiple regulations may exist on your parcel. You should find out if your land is in a protected "public water supply watershed" or a flood plain. Many activities such as culvert installations in streams are regulated. You will benefit from good planning by considering all construction activities.