

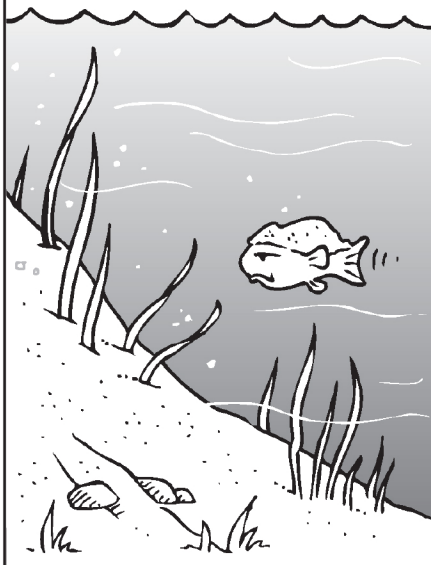


# Clearing and Grading Land

## Why be concerned?

Eroded soil is the #1 water pollutant in Cobb County streams. As it settles in streams, sediment can smother fish eggs and bottom-dwelling organisms and destroy aquatic habitat. Suspended sediment can interfere with the respiration and digestion of aquatic animals. Other pollutants such as metals and nutrients are often attached to soil particles. Finally, uncontrolled sediment can clog stormwater management systems, leading to higher maintenance costs and flooding.

Construction activities can also cause soils to become seriously compacted. Compacted soils prevent stormwater from filtering into the ground, increasing the volume and velocity of runoff. Since infiltration removes pollutants from stormwater, compacted soils also reduce water quality.



## Preventing Soil Compaction

Removing, storing and replacing the original topsoil on-site can destroy the natural soil structure, increasing compaction and lowering the soil's infiltration capacity. Mixing mulch into the sub-soil before replacing the topsoil can dramatically improve the soil's ability to store and filter stormwater. Be sure to mix mulches into the soil thoroughly. To help *prevent* soil compaction, concentrate construction traffic patterns as much as possible and indicate the designated traffic areas.



## Preserving Vegetation: the First Step

Vegetation prevents erosion. It also helps to slow and filter pollutants from stormwater. Therefore, it's important to preserve existing vegetation, wherever possible. Maintaining a vegetated buffer zone along pond and stream banks is especially important. Vegetated buffers should be as wide as possible since more plants will slow and filter stormwater before it enters the receiving waterway.

## SOILS EXPOSED!

In areas that must be cleared, limit the amount of disturbed area and the length of time that soils are exposed. This can be accomplished by:

- designing projects to retain as much open space as possible.
- phasing construction and, in general, clearing no sooner than necessary for construction activities.
- prohibiting clearing and grading along streambanks.

Once soils have been exposed, take steps to stabilize them *as soon as possible* with vegetation (such as sod laid perpendicular to the slope) or another type of cover (such as seed, straw, mulch or netting). See your local regulatory agency about stability time requirements.

## Directing Stormwater

Erosion can be further reduced by slowing stormwater and diverting it from exposed soils. Runoff can be diverted using vegetated berms or ditches. Runoff can be slowed by roughening surfaces, planting grass, terracing or contouring the site, installing filter fabric fencing and installing stone check dams.

## Controlling Sediment

Settling ponds, filter fences and other sediment control devices are used to keep eroded soil on site. Sediment controls filter soil from stormwater and/or reduce its velocity, allowing particles to settle out. For more information about how to choose and install sediment controls, contact one of the agencies listed under "Getting Help."

## Local and State Permits

Local land clearing and grading laws vary. Before clearing *any* land, check with the local government agency to find out about local restrictions and permit requirements.

For more information about county or state permit requirements, call one of the numbers listed under “Getting Help.”

## Maintaining Erosion and Sediment Controls

Erosion and sediment controls must be inspected frequently to assure function. This is especially important before and after rainstorms. Specific monitoring and maintenance activities may be required to comply with NPDES or municipal permit conditions. Again, check with relevant county, state and local agencies to find out more about permit requirements.

## GETTING HELP

Cobb County Community  
Development - Erosion  
and Sediment Control ..... (770) 528-2190

Cobb County  
Stormwater Management.. (770) 419-6435  
Water Quality Section .... (770) 419-6441

Community Partners for  
Healthy Streams ..... (770) 419-6303