# Help For Surface Erosion

# Did you know...

- Topsoil is one of our most valuable resources.
- Cropland represents the greatest soil erosion potential.
- Urban areas have high erosion potential.
- Sediment is the number one pollutant in West Virginia rivers and streams.
- 3.6 billion tons of sediment reach the ponds, rivers and lakes of our country each year.

**Erosion** is a natural process by which material is worn away from the earth's surface through the action of wind and water. Human activities upon the land tend to accelerate the process. Streams and rivers carry an estimated 3.6 billion tons of sediment away each year. The result is a net loss of valuable topsoil as well as excess loads of sediment in our



## What are the effects?

Excess sediment can be detrimental to aquatic life. As stream velocity slows, the suspended sediment falls to the bottom. As it accumulates on the bottom, it forms a blanket. Spawning beds for several species of game fish can be buried under this silt/sediment. With fewer places to spawn, game fish populations decline.

In addition to the loss of valuable topsoil, runoff can wash fertilizer and other pollutants along with it. Most phosphates and pesticides entering water are attached to soil particles. Nitrogen and phosphorous from fertilizers carried by runoff have been associated with many environmental problems. Streams, ponds, and rivers suffer from algae growth, depletion of the water's oxygen supply and suffocation of aquatic organisms.

Excessive quantities of sediment can also damage property adjacent to streams and rivers. Obstruction of stream channels by masses of deposited sediment reduces hydraulic capacity (the amount of water a stream can hold). This, in turn, causes an increase in flood crests which can lead to the potential for greater flood damage.

#### Simple things you can do to help control erosion

- Cover the bare spots of your property/yard.
- If using the land adjacent to a stream consider leaving a buffer strip.
- If you need or want access to the stream consider only mowing a path down to the stream bank instead of completely clearing it.
- Do not mow your lawn too short. Try to keep the grass height at about 2 1/2 inches.
- Do not place <u>any</u> structure in the stream. This could alter the dynamics of the stream and lead to serious erosion problems downstream or make existing ones worse.

### Your local USDA Service Center manages various conservation programs

- The Conservation Reserve Enhancement Program (CREP) offers long term rental
  payments and cost share assistance to establish permanent vegetative cover on
  eligible pasture land or cropland that is highly erodible or contributing to serious
  water quality problems.
- The Emergency Conservation Program (ECP) provides emergency funding for farmers and ranchers to rehabilitate farmland damaged by natural disasters.
- The Environmental Quality Incentives Program (EQIP) provides financial and technical assistance to implement structural and land management conservation practices on eligible agricultural land.
- For more information contact your local Conservation District, USDA Natural Resource Conservation Service or County Extension Agent.