

## Green Subdivision Lots Reduce Environmental Impacts



### Economics of Erosion Control

We have evaluated whether there are economic advantages for developers who use vegetative cover. If an economic advantage can be established, then developers should use erosion control on the basis of a profit motive. However, vegetative cover is also an important aspect of erosion control, that is required by regulations in most areas.

**Environmental Impacts**  
Nonpoint source pollution is the principle cause of surface water quality degradation in the U.S. Construction sites are a major source of nonpoint source pollution because as land is exposed and disturbed, soil erosion rates are dramatically increased. Much of the displaced sediment eventually reaches waterways where sedimentation can alter the physical and biological characteristics of streams, rivers, lakes and reservoirs. Because of these effects, local, state, and federal regulations requiring erosion and sediment control for construction sites have been enacted.



Stream sedimentation



### **Does Vegetation Cover Reduce Environmental Impacts?**

A recent study in Cuyahoga County, Ohio measured the effect of an aggressive seeding and mulching program on reducing nonpoint source pollution from construction sites. The results showed that widespread seeding and mulching on a residential construction site reduced soil erosion by up to 86% and phosphorous loadings by up to 80%.

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