



*Underwater grass beds are home to many living things.*

### **Sediment Kills**

Did you notice that when you watered your terrarium enough to cause a runoff, the runoff was cloudy? That's because it contained not only water but also tiny bits of soil, called **sediment**. Some sedimentation occurs naturally. But humans cause most of it, especially when we cut down trees and other vegetation.

Forests help keep sediment out of the Chesapeake. Tree roots help hold the soil in place. Their leaves and branches cushion rainfall so it hits the ground more gently. (Then the soil and roots have time to absorb the water.) Leaf matter on the forest floor acts like a sponge. Leaves soak up the water and slow its flow.

But we've cut down about 40 percent of the forests in the Chesapeake watershed to build highways, houses, shopping centers, and offices. Unlike forests, these hard surfaces (such as pavements and rooftops) prevent water from seeping slowly into the soil. When it rains, water races off these surfaces, picks up more sediment (and whatever it holds, such as pesticides or chemicals from asphalt roof tiles), and gushes toward the bay.

Like algae, sediment clouds the water and keeps light from reaching the underwater plants. It also can clog fish gills and smother fish eggs. Bottom dwellers such as clams, oysters, worms, sponges, and coral can smother under a layer of sediment.