

## How Erosion Hurts Water Quality

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Soil erosion occurs when soil particles are detached and moved from their original location, usually by water, wind or gravity. Though soil erosion is a natural process, accelerated erosion, caused by poor drainage, construction or other human activity, causes serious environmental problems. Soil erosion can degrade water quality and fish habitat if the eroded soil finds its way into streams and to the lake.

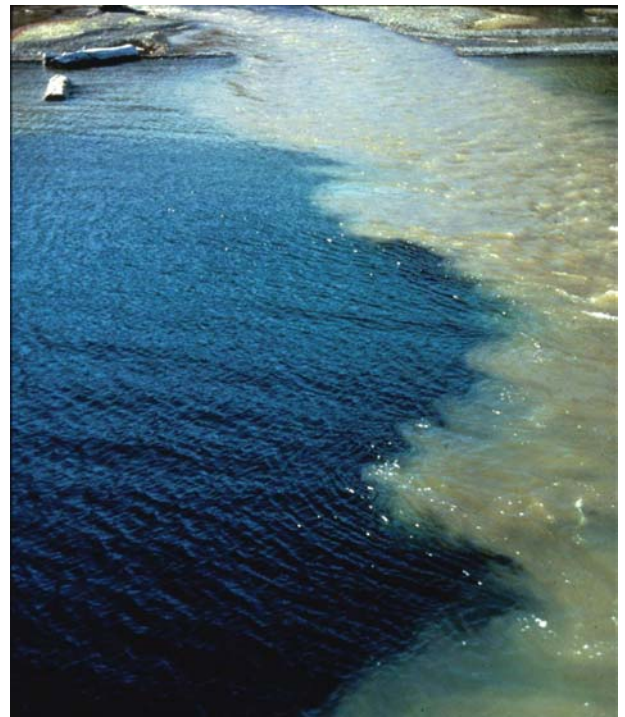


During rainstorms, snowmelt or irrigation, flowing water moves eroded soil, called sediment. Moving water transports sediment to Lake Tahoe via ditches, creeks and storm drains. Once in a creek or river, sediment buries aquatic organisms, smothers fish eggs, clogs fish gills and spawning gravels, and muddies clean waters. Eroded sediment also carries fertilizers, pesticides and other chemicals, any of which cause additional pollution

concerns for the lake. Sediment, especially fine particles and dust, carry phosphorus, the key nutrient stimulating the growth of algae that clouds the lake's waters. Fine sediment also remains suspended in the water rather than settling out, further reducing clarity.

What we do in our landscapes has a huge impact on the future of Lake Tahoe. If we allow sediment, fertilizers, pet waste or other pollutants to run off properties and roadways into the lake, its

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beauty could be destroyed in our lifetime.

To keep Lake Tahoe clear and blue, everyone must prevent water pollution. Since household sewage is treated at plants and pumped outside the basin, the real concern is non-point source pollution caused by activities at home, work and in our communities. This pollution comes from streets and properties rather than a single point such as the discharge pipe of a factory or wastewater treatment plant. It all adds up, whether it's litter out of a car window, soil erosion or fertilizer that washes off a landscaped area.

The first line of defense against nonpoint-source water pollution, or polluted runoff, is to follow guidelines known as Best Management Practices, or BMPs. The most challenging BMP at Lake Tahoe is erosion control.

### **Best Management Practices (BMPs)**

Best Management Practices (BMPs), designed to prevent nutrient and sediment loading to Lake Tahoe, are required on all commercial properties, on the public roadways, and yes, even on our own private property. Typically, a BMP retrofit for a residential property entails measures such as spreading mulch over exposed soil areas, paving dirt driveways, and in some cases installing infiltration systems next to driveways and under roof driplines. To schedule a free BMP Site Evaluation, call your local Conservation District, (530) 573-2210. The University of Nevada Cooperative Extension 160-page book, Home Landscaping Guide for Lake Tahoe and Vicinity, is included free as part of your BMP site evaluation.

### **Fertilizer Usage**

When you're fertilizing the lawn, remember you're not just fertilizing the lawn. The rain washes fertilizer along the curb, into the storm drain, and directly into our streams and Lake Tahoe. This causes algae to grow, which decreases the clarity of the lake. So if you fertilize, please follow directions and use sparingly.

### **Water Conservation**

Please don't waste water - To irrigate your lawn efficiently and avoid over watering, you should perform an "irrigation audit" (or "can" test) on your sprinkler system. If you are applying more than 1 and one-half inches of water per week in spring or fall, or more than 2 inches per week in July and August, you are over watering and perhaps leaching nutrients down into the groundwater. For more information, call Bill Carlos, (775) 784-4848, or Waste Not Incline Village GID, (775) 831-8603.