

## Erosion



PHOTOGRAPH BY ROBERT WUNDERLICH, MYSHOT

What is erosion? What effects does it have on the natural environment? How can we lessen its impact?

Water is a powerful force that is constantly changing the landscape.

**Erosion** is the process by which the land is fragmented by wind or water runoff.

**Water runoff** occurs when the soil becomes saturated and can no longer hold water.

When water runoff causes erosion, water flows over the earth and breaks it apart. This material is transported downhill.

Erosion can have several negative impacts on the environment.

For example, **sediment pollution** can occur when water runoff contains chemicals, heavy toxic metals, and bacteria that is harmful to people and wildlife. Erosion and water runoff can result in the transport of these pollutants to water sources.

**Sedimentation** occurs when eroded materials are deposited into streams, rivers, and storm drains, which may cause flooding.

This can also have harmful effects aquatic ecosystems by decreasing oxygen levels, eliminating food sources, and filling in crevices where animals take shelter.

What can we do to reduce these impacts?

**Vegetation** is a very powerful tool in decreasing erosion. The roots of plants hold the soil in place, which helps to prevent water runoff from dislodging it.

FIGURE 1. ROLE OF VEGETATION IN REDUCING EROSION AND STABILIZING SLOPES. (MENASHE, 1993)



For more information about the effects of sediment pollution and what you can do to help, check out this printable brochure from the Environmental Protection Agency:

[https://cfpub.epa.gov/npstbx/files/ksmo\\_sediment.pdf](https://cfpub.epa.gov/npstbx/files/ksmo_sediment.pdf)