



Keeping the land you paid for

Protecting your soil from wind and water

Would you be upset watching your dollars blow away in the wind or wash down a stream? If you see unusual amounts of dirt leaving your property, it is a similar loss. Topsoil is an extremely precious resource in Wyoming that contributes directly to the value of your land. Nature has taken thousands of years to build this nutrient-rich layer, and it supports many of the features of land that we consider beautiful, useful, or otherwise valuable. One way to protect this investment is to protect your land from erosion.

Erosion is the gradual (and in some cases quick) removal of soil by the action of water and/or wind on an unprotected soil surface. Erosion removes the nutrient-rich organic matter and finer soil particles, leaving behind nutrient-poor coarser materials. Along with being less fertile than intact topsoil, this coarse material doesn't hold water very well. This exposes your land's plant life to more frequent drought conditions, and plants growing in this material typically aren't as healthy and productive as plants growing in good topsoil.

Erosion is a natural process, but it can be greatly accelerated when the soil is disturbed. As you carry out

activities on your property, always consider their effect on the rate of erosion and take steps to minimize it. This is especially important if your place is located on some of our more fragile areas such as ones with extremely sandy soils or in areas having strong winds. Removal of vegetation exposes the land to the erosive power of wind and can make it very hard to re-vegetate.

The key to minimizing erosion on our Western lands is maintaining adequate plant cover (less bare ground exposed). Trees, shrubs, forage crops, and dense native grasses all provide good soil protection.

Some other tips for protecting your investment:

If you have livestock, read our "Grazing" section thoroughly, and consider how you can best protect your ground while making use of this great renewable resource (forage). A certain amount of bare ground is natural in many parts of the state; however, if you end up with more bare ground than you had before in your pastures, re-evaluate your grazing practices.

Reduce the amount of soil disturbance by vehicles, implements, and construction equipment or other

sources. Especially in sandy soils, these seemingly simple acts can result in channels forming that wash out during rain storms or snowmelt. See the Winter 2009 *Barnyards & Backyards* magazine article "Planning to build? Thinking ahead can save you time, money – and precious topsoil" for a host of tips on things to do before, during, and after construction that will conserve the good things you purchased your land for and minimize the development of bad ones.

Keep roads to a minimum, and use good road base to reduce soil disturbance.

Mulching flowerbeds and around trees is an excellent way to help stop erosion and help conserve water. Read this guide's "Water-wise Landscaping" section for a further discussion of mulch.

When growing conventional row crops, consider using conservation tillage practices. Let residues from past crops cover the soil surface.

Investing time and effort into the protection of your topsoil pays enormous dividends. Take care of your land, and it will take care of you.

Material for this section was contributed by Kelli Belden, Dallas Mount, and Jennifer Thompson.