2) Maintain or enhance existing vegetation under eave drip lines. To reduce fire danger, use turf or herbaceous plants instead of flammable shrubs such as junipers.

3) Gutters and downspouts, if properly cleaned and maintained, can convey roof runoff to a location where it can infiltrate into the ground. Dissipate the energy of the concentrated outflows from downspouts by armoring the runoff receiving area with rock or sturdy vegetation like turf. See FS-10-48, “Put Runoff in Its Place,” for more information on infiltrating roof runoff.

Roadside Ditches

In some neighborhoods, a ditch next to the street collects water during storms. This roadside ditch is usually in the public right-of-way. Its purpose is to convey water runoff from streets to the nearest stream or to the river. If the sides and bottom of this ditch consist of bare, unprotected soil, the soil will erode during rainstorms. Homeowners who would like to control this erosion and improve the appearance of their front yards can landscape these areas, using rock or gravel mulch, native or adapted plants, or low retaining walls to prevent erosion. Contact the Carson City Public Works Department if you would like to landscape in the public right-of-way in front of your house.

Carson City Storm Water Hotline
887-2305

Helpful Publications

Home Landscaping Guide for Lake Tahoe and Vicinity. Available online at:

Choosing the Right Plants for Northern Nevada’s High Fire Hazard Areas. Available online at:

Low Impact Development in Northern Nevada: Plant Materials. Available online at:

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Keep Your Topsoil in Place – Prevent Erosion

All photos courtesy of J. Cobourn.
Introduction

Millions of tons of topsoil are lost from residential properties every year due to wind and water erosion. When a property loses topsoil, it loses a valuable part of the landscape. Good topsoil is necessary to grow thriving plants. Areas of bare soil can make a landscape look unattractive. Bare soil should be covered with plants and/or mulch. To make your property look its best, keep topsoil in place by preventing erosion. Your home, paved walkways, driveway and patio all prevent rainwater and melting snow from soaking into the soil. When precipitation runs off these surfaces, it can gain erosive power to wash away soil that is not protected by plants or mulches. This eroded soil, called sediment, can be carried downhill for long distances and deposited in city storm drains and culverts, plugging them up and causing localized flooding. If this sediment makes it to the river, it can pollute the water, harm aquatic habitat and fill downstream reservoirs.

Look for Bare Eroding Soil on Your Property

Observe what happens during irrigation, a rainstorm or strong winds. Do you see muddy water flowing off your property or dust clouds carrying your soil away? If so, your property has an erosion problem. Properly integrated soil, mulch and vegetation should be able to absorb rainwater, snowmelt, and irrigation water to prevent soil erosion. Ideally, a landscape should absorb all the water it receives, like a sponge. When water can’t soak or infiltrate into the topsoil, it accumulates on the surface, then runs off, flowing down slope as a sheet or thin film, taking soil with it.

Small streams of water that cut separate channels, called rills or gullies, are greater threats. If you spot rills or gullies, or fans of soil deposited in low areas after a rainstorm, your property is losing precious topsoil.

Plant Native and Adapted Plants with Mulch in Between

Plant or mulch areas where there is bare soil in your landscape. To do this, you may first need to improve the soil by adding organic matter such as aged compost. This should be tilled in to a depth of 6 to 10 inches. For plant selection, refer to “Choosing the Right Plants for Northern Nevada’s High Fire Hazard Areas” (EB-07-01). Draw your planting plan on paper, and space the plants to allow for their size at maturity. Install a drip irrigation system to establish thriving plants. You can get help from University of Nevada Cooperative Extension at 775-887-2252.

Between landscape plants, there will usually be bare soil. It is very important to cover this bare soil with either organic or inorganic mulch.

Prevent Erosion Under Roof Drip Lines

One area that erodes easily on many properties is the “drip line” beneath roof eaves, where roof runoff can create a small waterfall onto the soil below. Drip line erosion not only looks bad, it can also stain the siding on your house with muddy water.

There are three easy methods to reduce drip line erosion:

1) Armor the soil under eave drip lines with drain rock or cobblestones. If the soil is compacted, break it up first with a pick and shovel or hard rake to promote water infiltration. In addition, you can improve your home’s resistance to wildfire by spreading the gravel from the footing to 5 feet from the house.