

Source Control BMPs

Source control Best Management Practices or BMPs, includes measures that keep soil particles in place by protecting them from being eroded by water or wind. Here are some typical source control methods:

Gravel Armor for Driplines, Gutters and Downspouts

The ground surface below the roof eave that receives the concentrated water flow is the “dripline.” Several options are available to prevent this water flow from causing soil erosion. Driplines can be armored with rock or gravel to prevent soil erosion. A vegetated or rock-lined swale is a depression that collects runoff and conveys it to an infiltration system at the end of the swale. Another option is to capture rooftop runoff in gutters and downspouts which create higher concentrations of water that require the addition of an energy dissipater such as a rock apron. Note: armored driplines need a protective border to retain the material and exclude adjacent soil. Borders can be made from rock, cobble, stone, pressure treated wood (if outside non-combustible 5 foot zone), or recycled composites.



Gravel Armor Elevated Structures/Decks

If there are spaces between planks on raised decks and stairways, water falling through them to the soil below may cause erosion. Cover bare soil between stairs and underneath elevated structures such as decks with drain rock, gravel or rock. Note: Armor under elevated structures need a protective border to retain the material and exclude adjacent soil. Borders can be made from rock, cobble, stone, pressure treated wood (if outside the five-foot non-combustible zone), or recycled composites.



Stabilize Bare Soil

Vegetation and mulch can help stabilize soils and prevent sediment from being transported offsite. To prevent soil erosion you can revegetate and mulch the bare soil in accordance with the TRPA Handbook of Best Management Practices and Fire Defensible Space requirements. Discontinuous patches of organic mulch separated by irrigated herbaceous vegetation, rock, or other noncombustible materials are permitted on the property. Pine needles can be used as organic mulch but they should be removed annually by May 1 every spring and do not let them accumulate more than 1-2 inches in depth.



Slope Protection

While soil loss can occur on level ground during high wind or rainstorms, soil erosion is much more severe on unvegetated, sloping ground. Materials such as rock, wood and vegetation can help stabilize soils and prevent sediment from being transported offsite. Some slopes may require mechanical stabilization methods such as retaining walls, rock riprap, and terraces.



Pave Dirt Driveways, Parking Areas, and Roads

Compacted dirt areas routinely disturbed by vehicular traffic are notorious sediment sources, especially in the winter during snow removal activities. Compacted dirt areas shall be paved or blocked off and restored to support vegetation and prevent future disturbance.

TRPA allows each single-family residential property 400 sq ft of paving (the equivalent of two spaces) without a site assessment to verify coverage. Additional paving beyond 400 sq ft must be verified coverage.



Parking Barriers

Parking barriers prevent future soil disturbance and compaction from vehicle traffic. They consist of large boulders, bollards, a fence and large established vegetation.



Fire Defensible Space

To be Fire Defensible Space (FDS) compliant, no combustible materials, such as pine needles/cones, woodchips or woody vegetation, are permitted within 5 feet of any structure. Gravel and rock or irrigated herbaceous vegetation are acceptable alternatives. Property zones outside of the 0-5' zone must also be compliant with the BMP Handbook Chapter 5.3.2.5 on Fire Defensible Space: <https://www.tahoebmp.org/bmphandbook.aspx>

Visit <http://www.livingwithfire.info/> for more information.



Use TRPA's BMP Handbook (<https://www.tahoebmp.org/bmphandbook.aspx>) and the NRCS Standard Drawings under BMP Technical Information (<https://www.tahoebmp.org/BMPResources.aspx>) for direction on how to install BMPs on your property.