

# Study: Woodchips tilled into soil best for erosion, fire concerns

A three-year study in the Lake Tahoe Basin has determined that tilling aged woodchips into the soil is the most effective way to minimize fire risk and preventing erosion.

Integrated Environmental Restoration Services Inc. in collaboration with Tahoe Resource Conservation District, Meeks Bay Fire Protection District, North Tahoe Fire District, and Homewood Mountain Resort, recently completed study. The goal was to find common ground between landscape treatments that are effective at preventing soil erosion and minimizing the risk of fire.

Different materials and practices were used, like pine needles, aged duff, woodchips, composted woodchips, landscape bark purchased in stores, and duff and wood chips tilled into the soil, for erosion and fire risk.

The materials were exposed to a simulated rainstorm. To test for fire risk, materials were set on fire using a drip torch by firefighters and measured for flame height, rate of flame spread and burn temperature of the different materials.

Of all the treatments tested, the study found that mixing 1 to 3 inches of wood chips into soil to a depth of 4 to 6 inches promotes water infiltration.