



Erosion Control in the Wake of Fires: The Compost Solution



building healthy soils

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Association of Compost Producers



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The Problem

The devastation caused by recent wild fires lays the groundwork for even more damage as seasonal rains create mud slides. Fire causes the soil structure matrix to flatten, creating a layer which blocks water infiltration and leads to mudslides and severe erosion. When rain, which often has the force of 25 lbs. a drop, hits the weakened soil, it breaks apart the soil particles. Because the water can't infiltrate the burned layer, even more erosion occurs. In addition, the loss of vegetation on fire damaged slopes leaves little to hold the soil in place during rains.

The Compost Solution

One of the best remediation techniques is the application of composted mulch. This can be applied as a blanket 3" to 4" deep to reduce erosion caused by the impact of water. The beneficial microbes in compost work rapidly to rebuild the soil structure and improve water infiltration rates, allowing water to penetrate the soil rather than run off, washing away soil with it. The natural, sustained nutritive aspect of compost will promote healthy and rapid re-vegetation without polluting waterways.

When used as a berm, compost out performs straw wattles and silt fence because the compost filters the water rather than acting as a dam, which ultimately gives way. Silt and soil particles settle out rather than being carried away. The compost doesn't require removal in the future, as do straw wattles, sand bags and silt fences. Compost also binds heavy metals, improving the water quality substantially when runoff does occur.

Please see the articles and materials attached for documentation as to the effectiveness of composted mulch in dealing with erosion control in the wake of fires. The sources are varied, including the United States Environmental Protection Agency, a feature article from Erosion Control Magazine, University of California Riverside Cooperative Extension, University of Georgia College of Agricultural and Environmental Sciences Cooperative Extension Service, University of Davis Road Ecology Center, Texas Commission on Environmental Quality, and BioCycle Magazine. Much research confirming the properties of composted mulch has been conducted here in San Diego at SDSU.

Agri Service, Inc. Assistance

This is a difficult time for those affected by the fires. We would like to help by providing you with free Unscreened compost and/or compost Overs material to help fire survivors prepare for winter storms. Both contain woody material to minimize the effect of water impact, beneficial microbial populations and slow release plant nutrition. Freight and spreading will be covered by you or we will waive loading fees if you bring your truck. Please contact us for further information.

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