

Organic Materials Management

Erosion Control

[Green highlighted words](#) indicate definitions and links to the glossary section.

[Roadside Vegetation and Erosion Control Workshops, Fall 2006](#)

The California Integrated Waste Management Board, in partnership with the Caltrans Headquarters Landscape Architecture Program, held a series of five workshops throughout the state in August and September focusing on new special provisions using [compost](#) to improve roadside vegetation and reduce erosion.

Past CIWMB Erosion Control Projects

The CIWMB has funded several projects involving applications of [mulch](#) to various Napa and Sonoma County hillside vineyards as erosion control. Using mulch in other grower settings such as lemon orchards in Ventura County has shown promising results to date in both erosion control and weed suppression. In addition, the Board is nearing completion on a project with the Department of Transportation (Caltrans) that uses various mulch, [compost](#), and [co-compost](#) materials as erosion control materials for re-vegetation of roadsides that could potentially erode.

Vineyard Erosion Control

In March 1999, the Board awarded contracts to two partnerships in the Napa/Sonoma area to demonstrate the effectiveness of mulch on hillside [erosion control in vineyards](#). Both groups spread mulch made from yard trimmings on hillside vineyards in the winter of 2000 and will monitor erosion after each major storm event until May 2001.

Orchard Erosion Control

Erosion control professionals have evaluated municipal mulch and various types of compost under field situations as surface amendment material for erosion control and re-vegetation of disturbed or degraded soils. A municipal [mulch demonstration](#) conducted by University of California (U.C.) Cooperative Extension, Ventura County indicates soil erosion, soil compaction and snail activity are significantly reduced with the use of yard trimmings in commercial citrus orchards. The mulch applied at least 3 inches deep in the orchard rows also provides weed suppression, soil moisture conservation, water infiltration, soil fertility, improved soil structure, and moderation of soil temperatures.

Roadside Erosion Control

A Caltrans/U.C. Davis literature review and [research study](#) found that various types of compost made from municipal yard trimmings and other organic materials are excellent amendment materials for roadside erosion control. The study documented that composts vary considerably in physical and chemical characteristics. More research is needed to explore the great potential that exists in establishing plant growth on harsh erosion sites with compost containing slow-release forms of nutrients. Plant available moisture and nitrogen are often the major limiting factors to plant establishment on disturbed soils. The mulch effects and organic substrates contained in compost are expected to regenerate some of the functions of natural soil organic matter including decreased evaporation from the soil surface, increased microbial activity for soil

aggregate formation, improved slow-release nutrient availability, and improved nutrient and water holding capacity.

Erosion Control Publications

The following publications are available from the Board's online publications catalog, or by calling 1-800-CA-WASTE (toll free in California).

- [*Vineyards Benefit From Compost and Mulch*](#). Download or order a hard copy of this fact sheet.
- [*Stop Runaway Soil--Use Mulch! An Erosion Control Guide for Citrus Growers*](#) (hard copy brochure only).
- [*Compost Demonstration Project, Placer County: Use of Compost and Co-Compost as a Primary Erosion Control Material*](#). Download or order a hard copy of this 20-page report.

External Links

- [Erosion Control Magazine](#)
- [International Erosion Control Association](#)
The International Erosion Control Association is a nonprofit, member organization that provides education, resource information and business opportunities for professionals in the erosion and sediment control industry.
- [Natural Resources Conservation Services](#)