

## CALIFORNIA THE GOLDEN STATE



## California Environmental Protection Agency Regional Water Quality Control Board Santa Ana Region 8

## Erosion & Sediment Control

Preventing all forms of water pollution is a responsibility shared by everyone. Soil erosion and sedimentation are forms of water pollution, and pose a significant threat to the quality of our waters. Erosion is the washing away of soil by water. Sedimentation is the accumulation of eroded soil and other matter washed into our waterways from the land. Sedimentation pollutes drink water supplies; causes destruction of fisheries; clogs, storm drains, culverts, and streams, leading to flooding; and results in excessive siltation of bays, lakes and reservoirs. Sediments can also carry harmful and toxic pollutants. Erosion can damage private property and public infrastructure, including water, sewer, utilities and transportation systems.

Natural resource and land development and construction projects of all sizes, from a house on a single vacant lot to the mass-graded subdivision, from backyard gardening to timber harvesting, and from grading a driveway to building a freeway, are often associated with erosion and sedimentation problems. Before, during, and after development or construction, various government agencies have permitting and decision-making authority over development and construction projects. These agencies have the ability and responsibility to manage all forms of water pollution associated with land development, including erosion and sedimentation, through their approval processes. (San Francisco Bay Regional Water Quality Control Board)

Erosion control practices protect the soil surface and prevent soil particles from being detached by rainfall or wind. Erosion control treats soil as a resource with value and works to keep it in place. (San Francisco Bay Regional Water Quality Control Board)

Sediment control practices, on the other hand, trap soil particles after they have been dislodged and moved. Sediment controls are generally passive systems that rely on filtering or settling soil particles out of the water (or wind) that is transporting them. Sediment control treats soil as a waste product and works to remove it from water, storm water runoff in particular. (San Francisco Bay Regional Water Quality Control Board). Below, you will find links to valuable web-sites that provide options for erosion and sediment control:

http://www.ianr.unl.edu/pubs/soil/g1307.htm#bioeng Useful bioengineering techniques for contractors, homeowners and others who have streamside or lakeside property and an interest in natural restoration of landscapes.

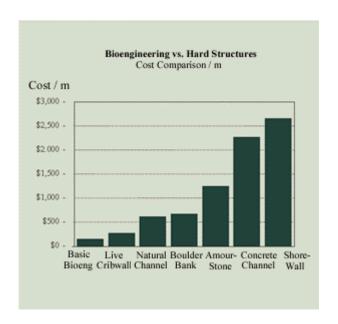
http://www.on.ec.gc.ca/doc/cuf\_factsheets/soil-bioeng-e.html Controlling erosion through the alternative process of soil bioengineering and vegetation planting.

http://www.usda.gov/stream\_restoration/PDFFILES/APPENDIX.pdf
This 33 page,
illustrated appendix from the Federal Interagency Stream Corridor Restoration Handbook
discusses a wide range of techniques for preventing, managing and controlling erosion
and sedimentation in and along streams

http://www.usda.gov/stream\_restoration/appendix.html
This page is a picture index to erosion control techniques for a variety of settings, from the Federal Interagency Stream Corridor Restoration Handbook

http://www.co.lake.il.us/smc/wdo/StrmManual.pdf This 24 page, illustrated manual describes both bioengineering and structural approaches to erosion and sediment control.

http://www.casqa.org/ The Work Products of this task force, a coalition of California municipalities and other public agencies, include the California Stormwater Best Management Practices Handbook series, handbooks of BMPs for construction activities, municipal activities, industrial and commercial activities, and for conducting storm water compliance inspections of industrial facilities.



This informational chart was obtained at: <a href="http://www.on.ec.gc.ca/doc/cuf">http://www.on.ec.gc.ca/doc/cuf</a> factsheets/soil-bioeng-e.html