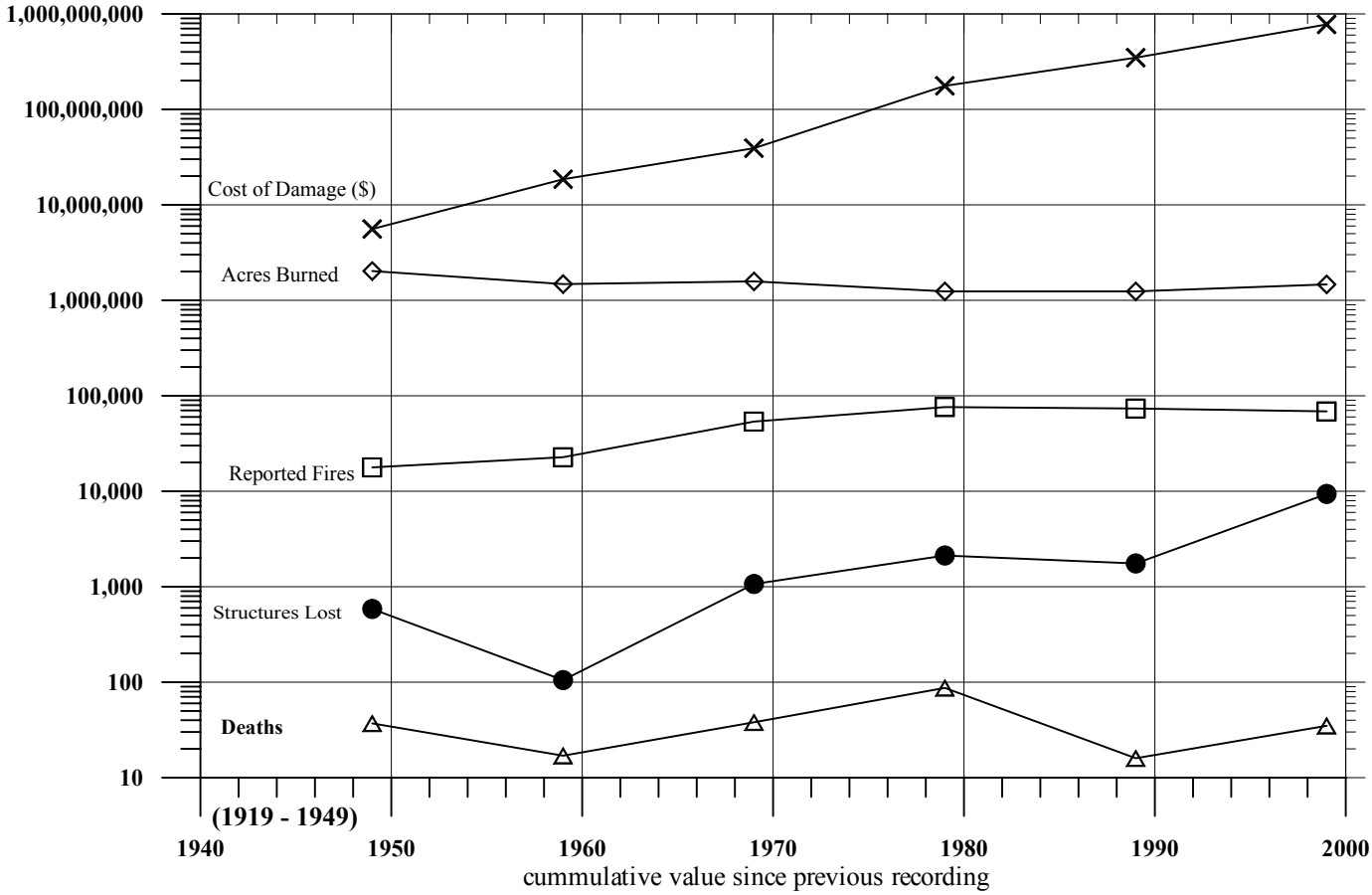


Figure 1 The cost of California's fire history
(data provided by California Department of Forestry and Fire Protection)

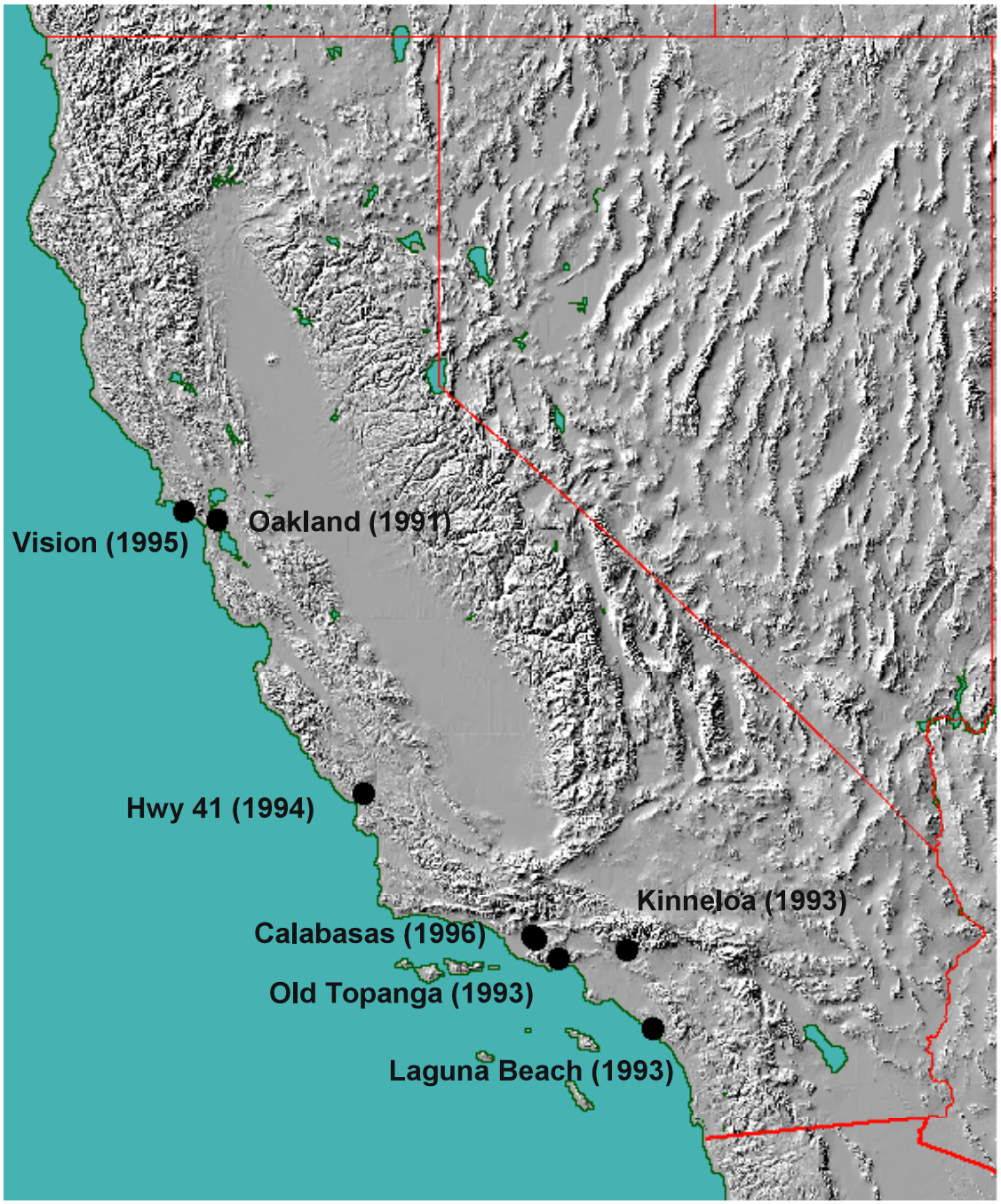


Figure 2 Location of monitored California Wildfires (Booker, 1998)

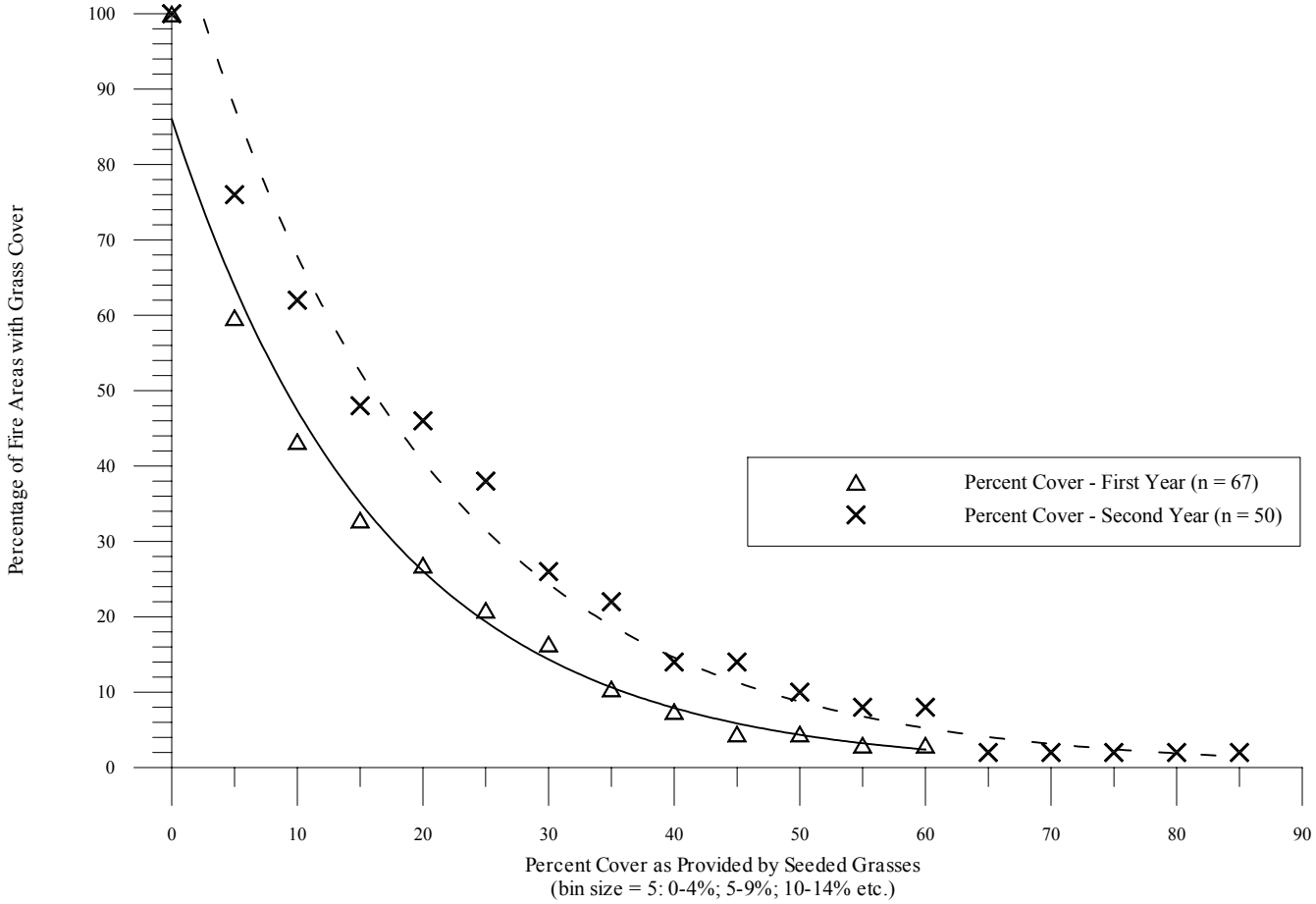


Figure 3 Percent Cover Provided by Seeded Grasses (1956 -1972)
(data collected from CDF Annual Reports of southern California Wildfires)

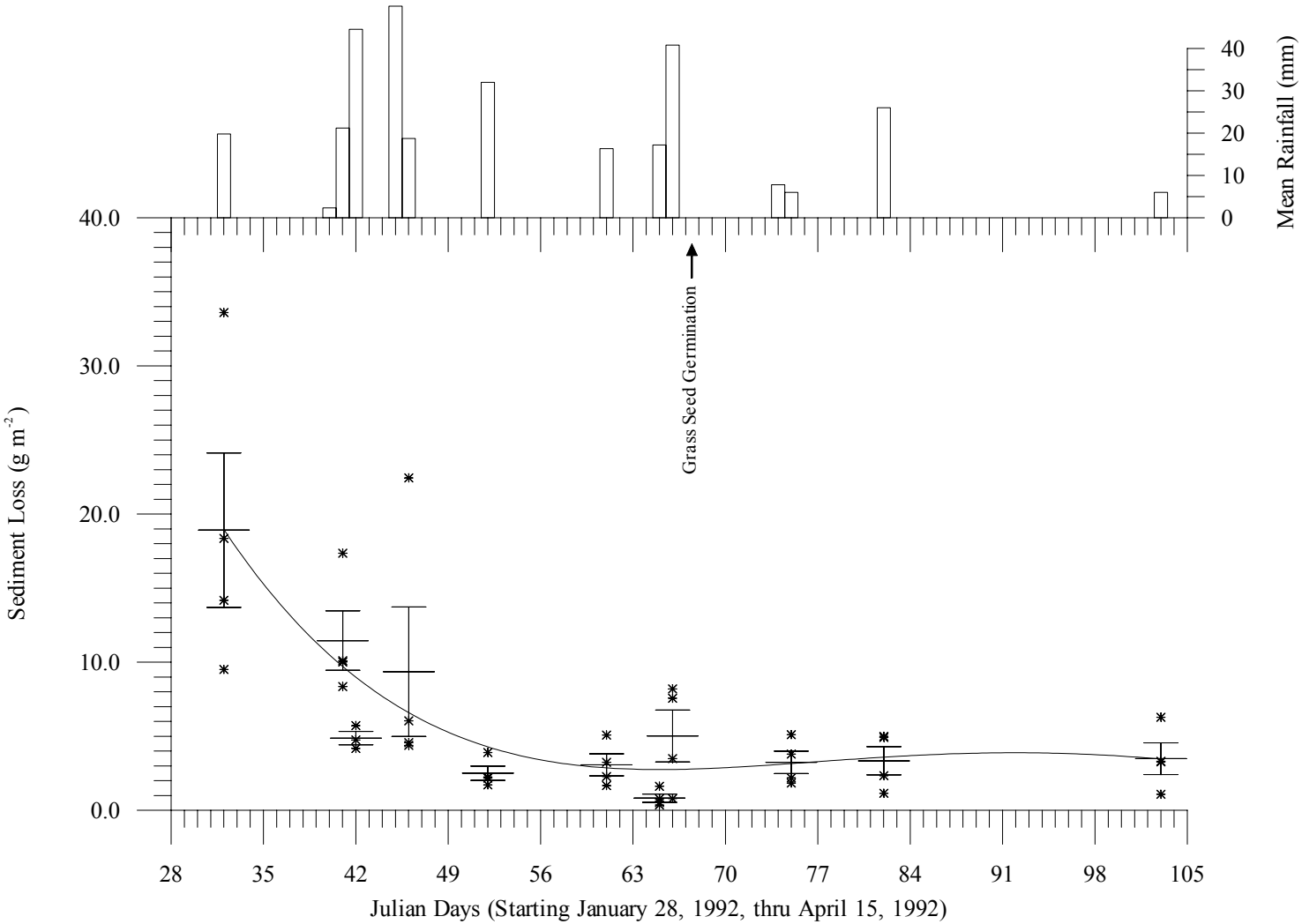


Figure 4 Sediment loss - Oakland Burn Area Erosion Plots

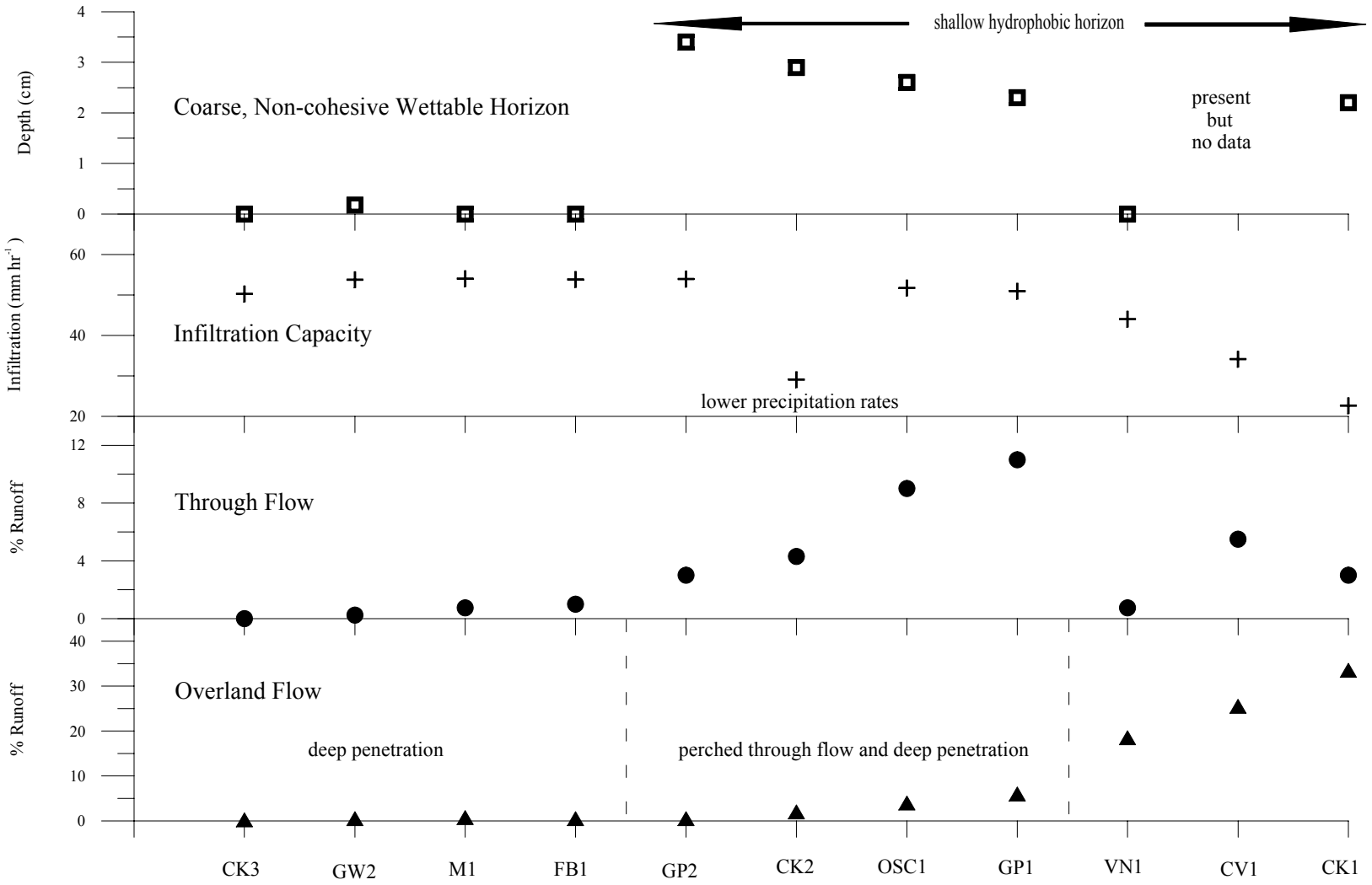


Figure 5 Runoff, Throughflow, Infiltration Capacity, and the Thickness of the Wettable Horizons for Sprinkler Experiment Plots

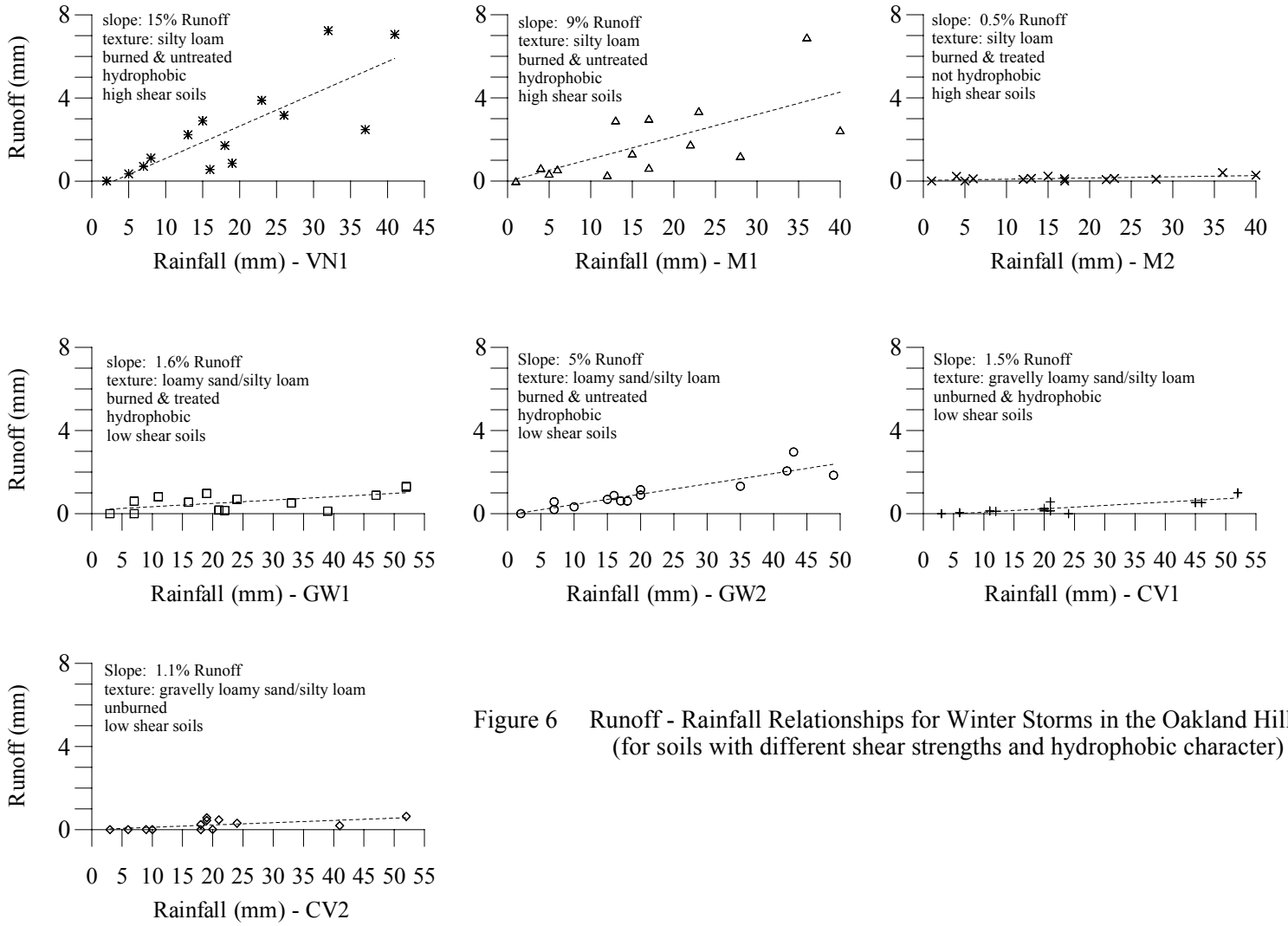


Figure 6 Runoff - Rainfall Relationships for Winter Storms in the Oakland Hills (for soils with different shear strengths and hydrophobic character)

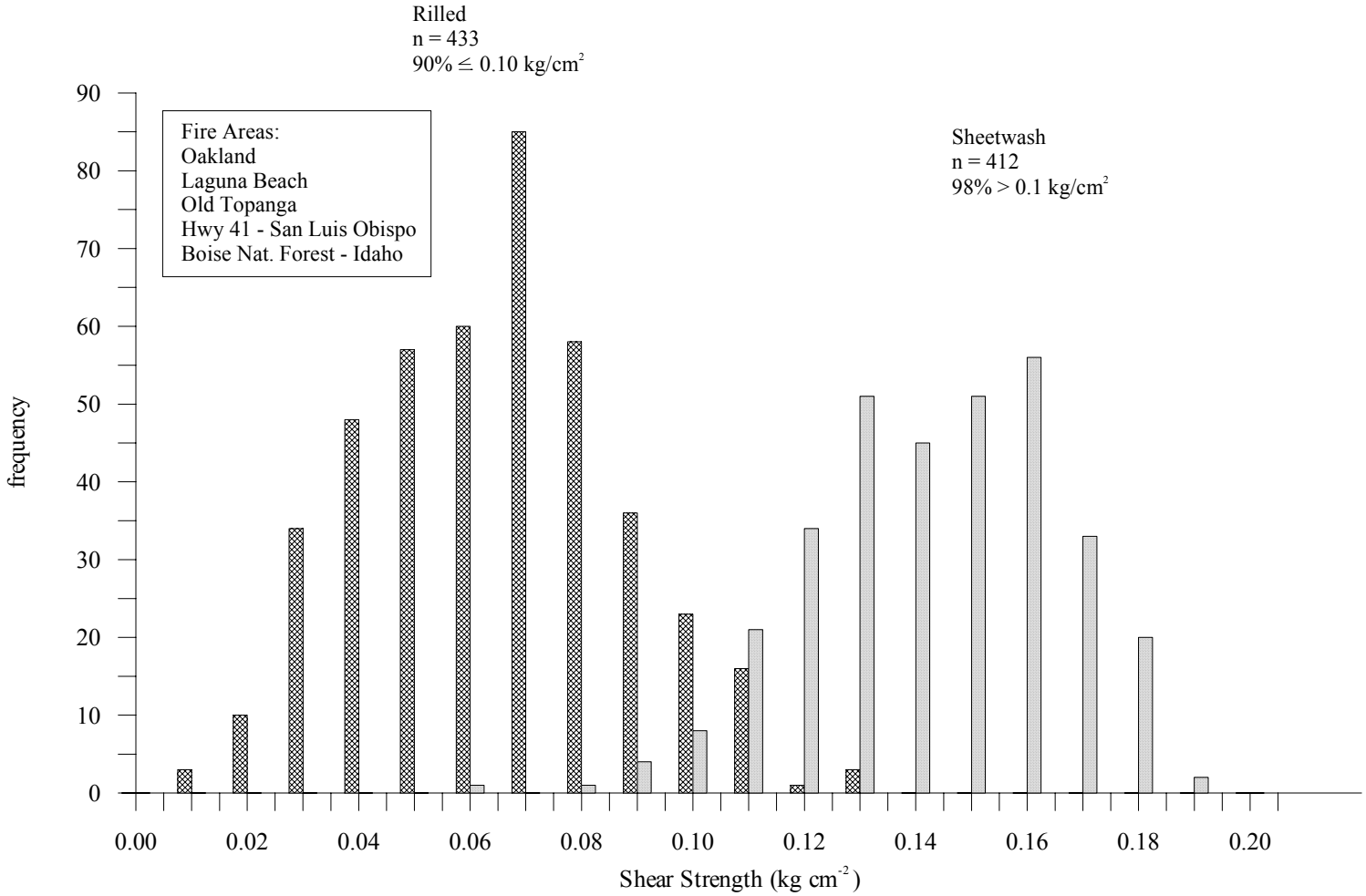


Figure 7a Shear Strength of Rilled and Unrilled Soils in Five Fire Areas

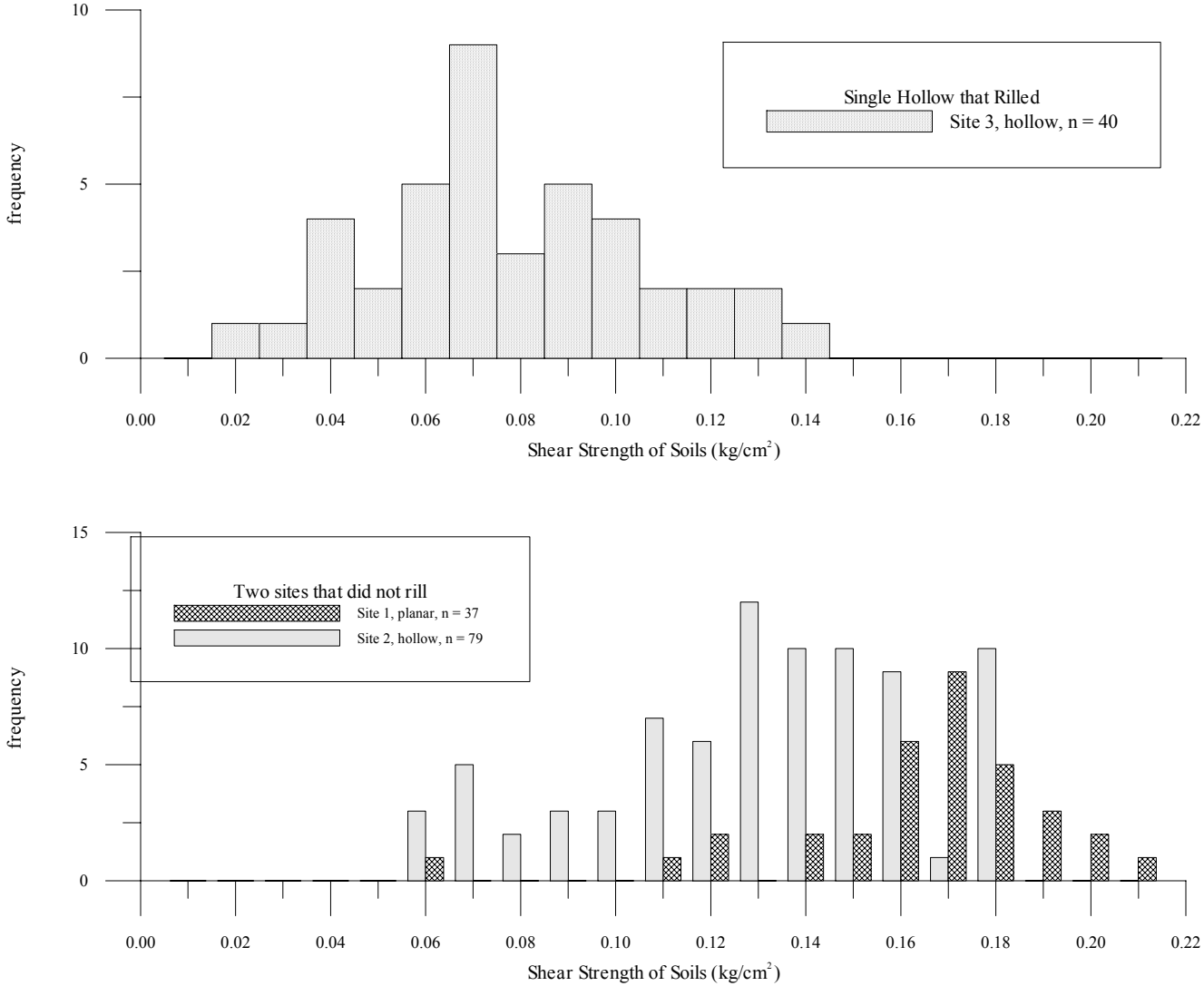


Figure 7b Shear strength of soils at 3 sites within the Calabasas Fire area, Los Angeles County

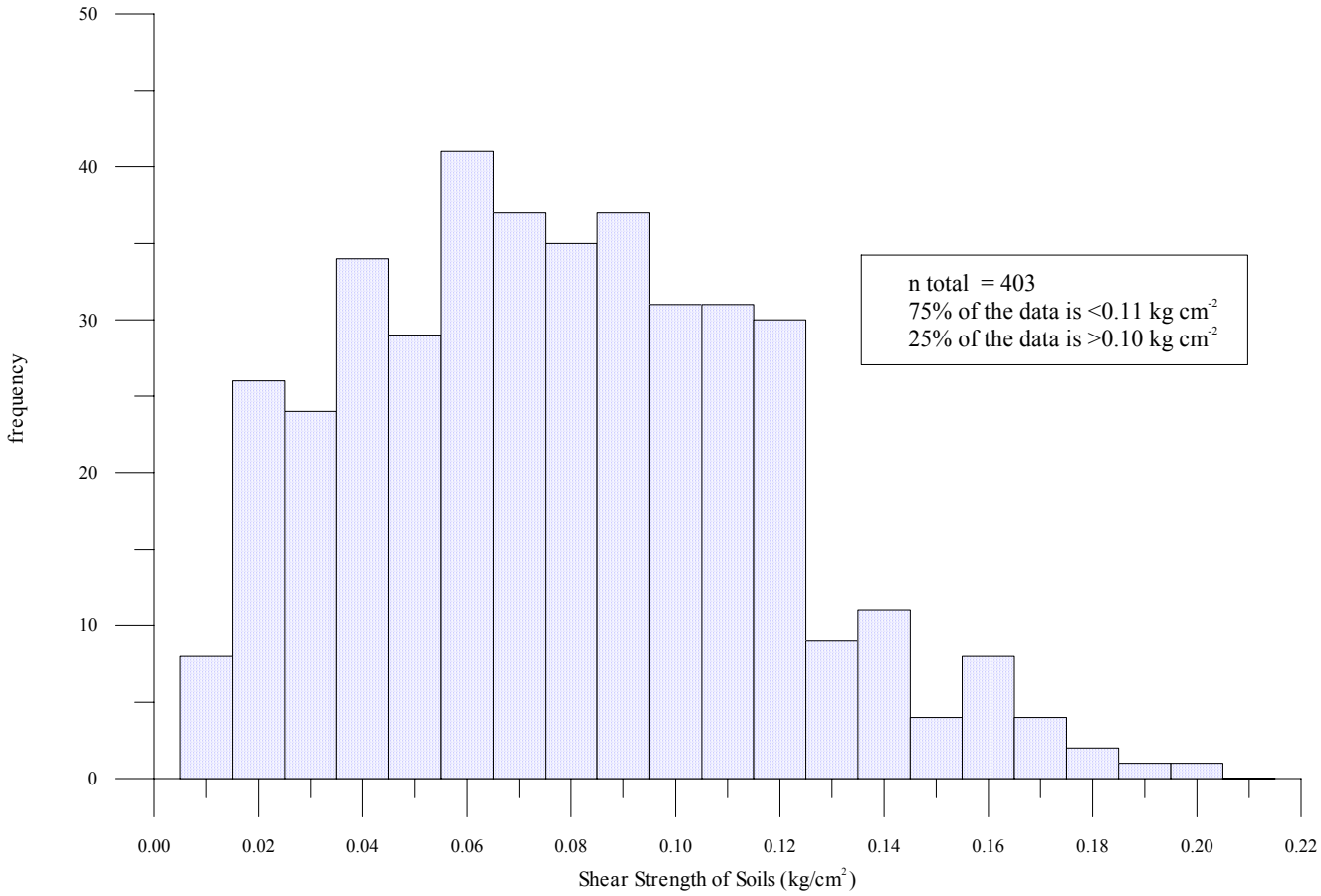


Figure 7c Shear strength of soils at 9 sites within the Mount Vision Fire area, Pt. Reyes National Seashore

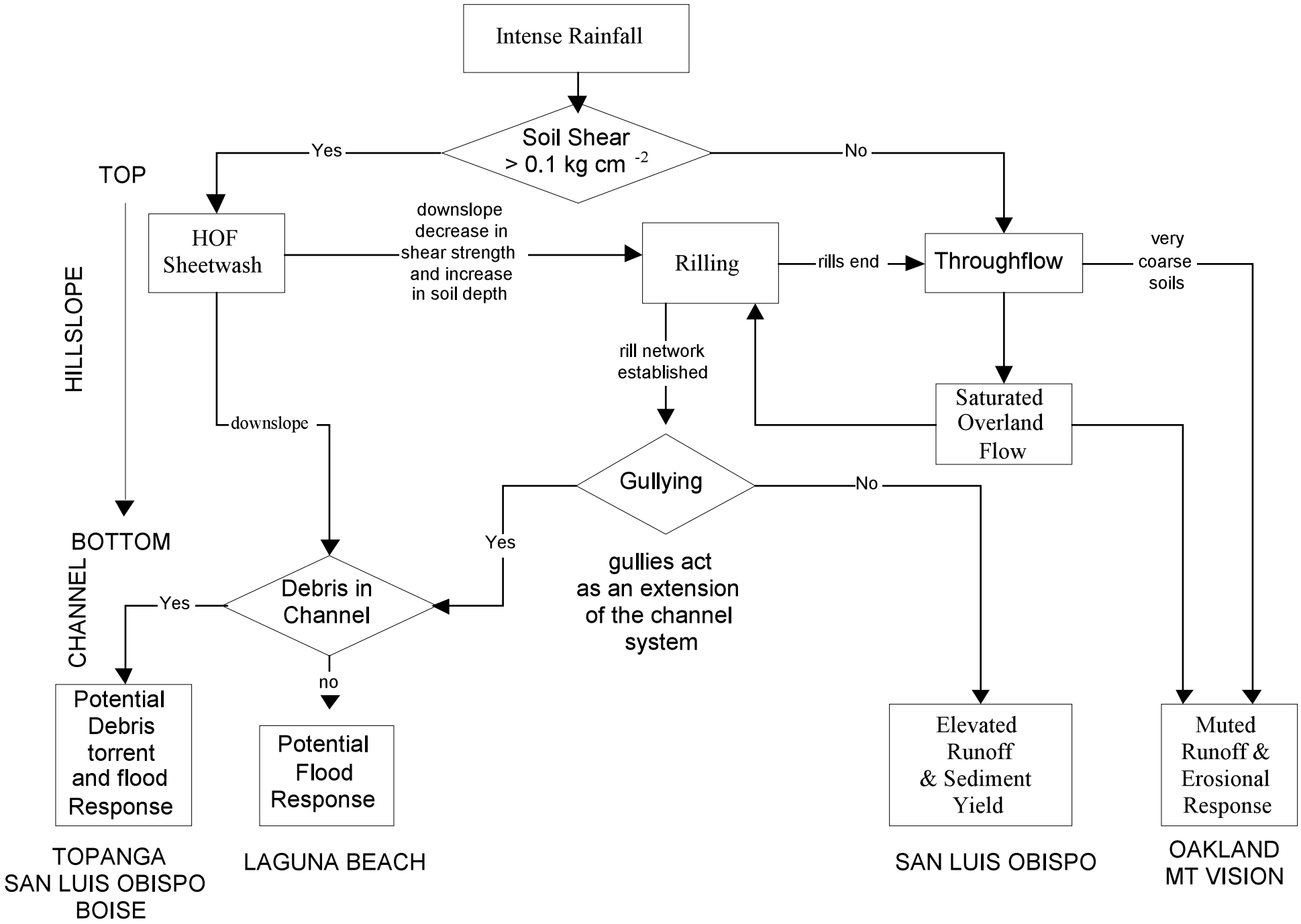


Figure 8a Hydrologic and Erosional Response for Intense Rainfall Events

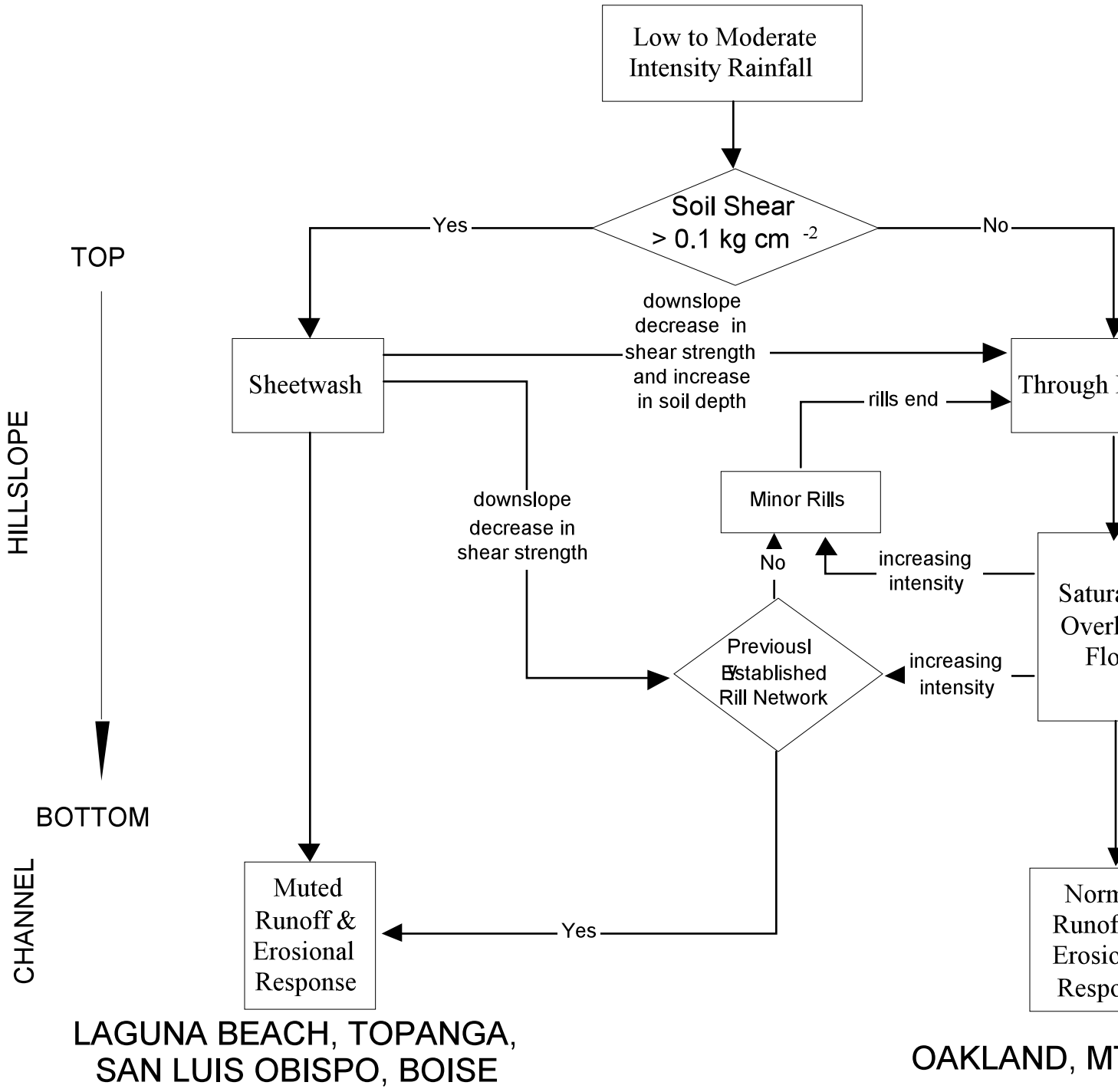


Figure 8b Hydrologic and Erosional Response for Moderate to Low Intensit

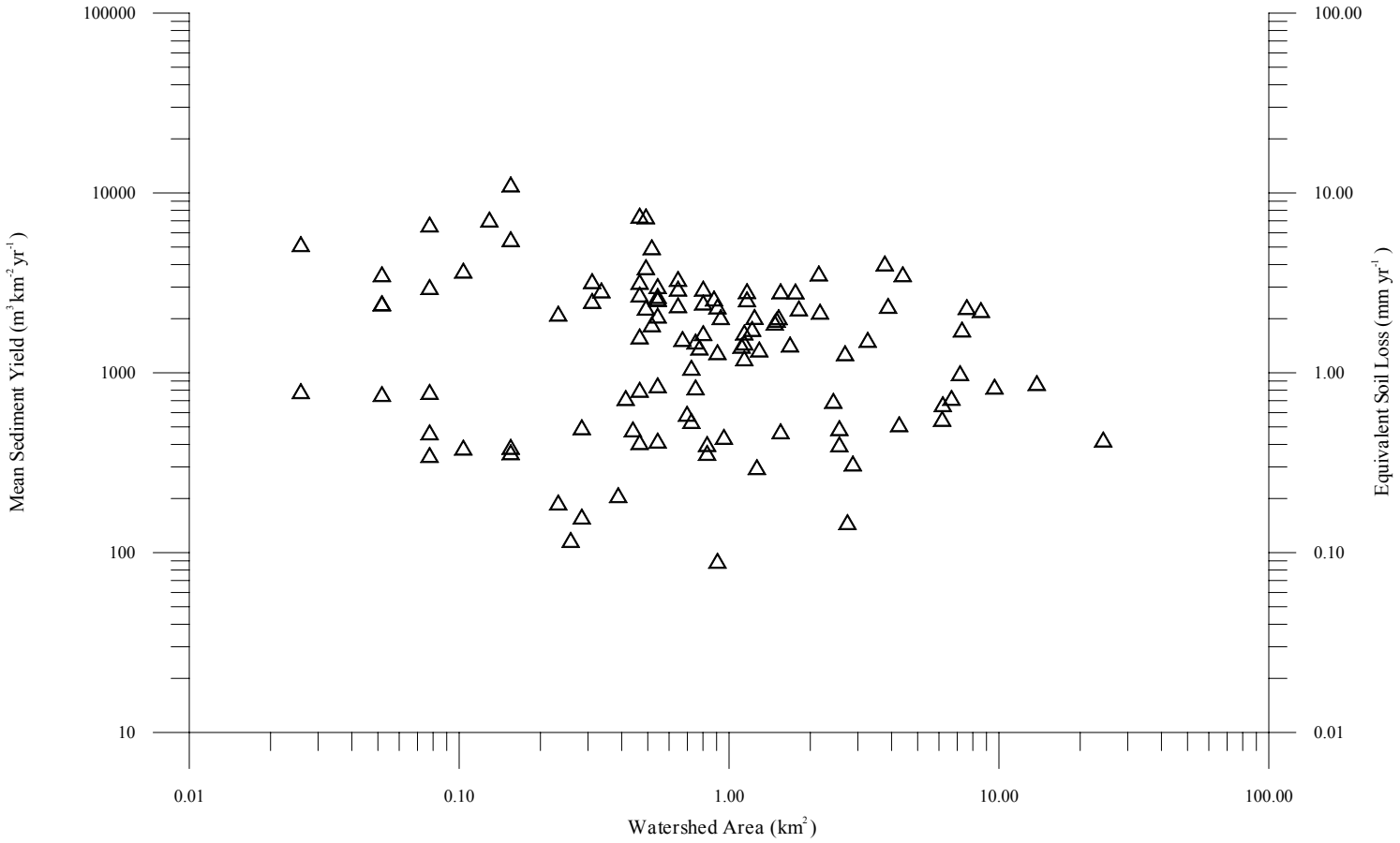


Figure 9 Mean Sediment Yield for 108 Debris Basins in Los Angeles County

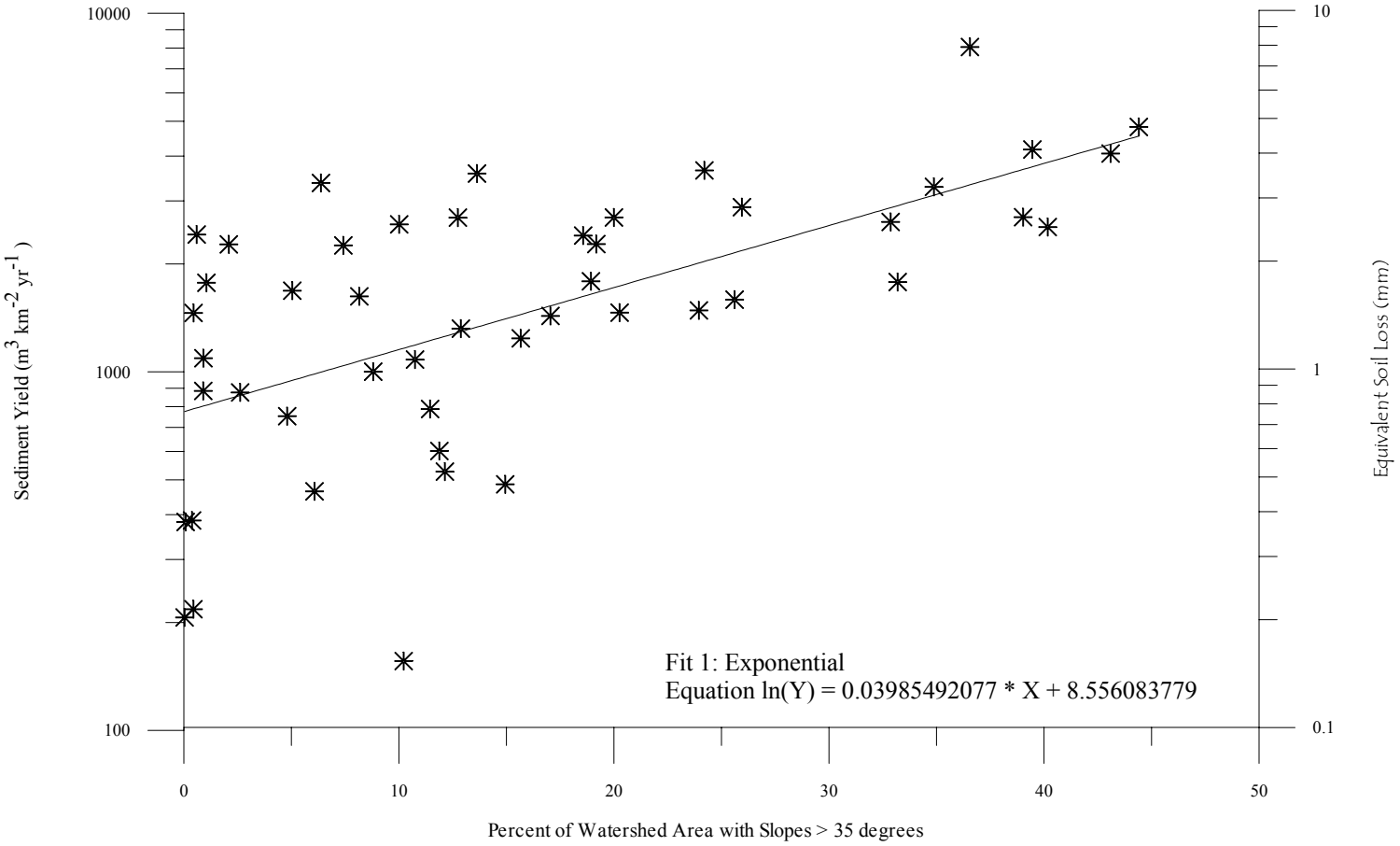


Figure 10 Sediment Yield for Debris Basins with Slopes > 35 degrees and a 20 Year Record

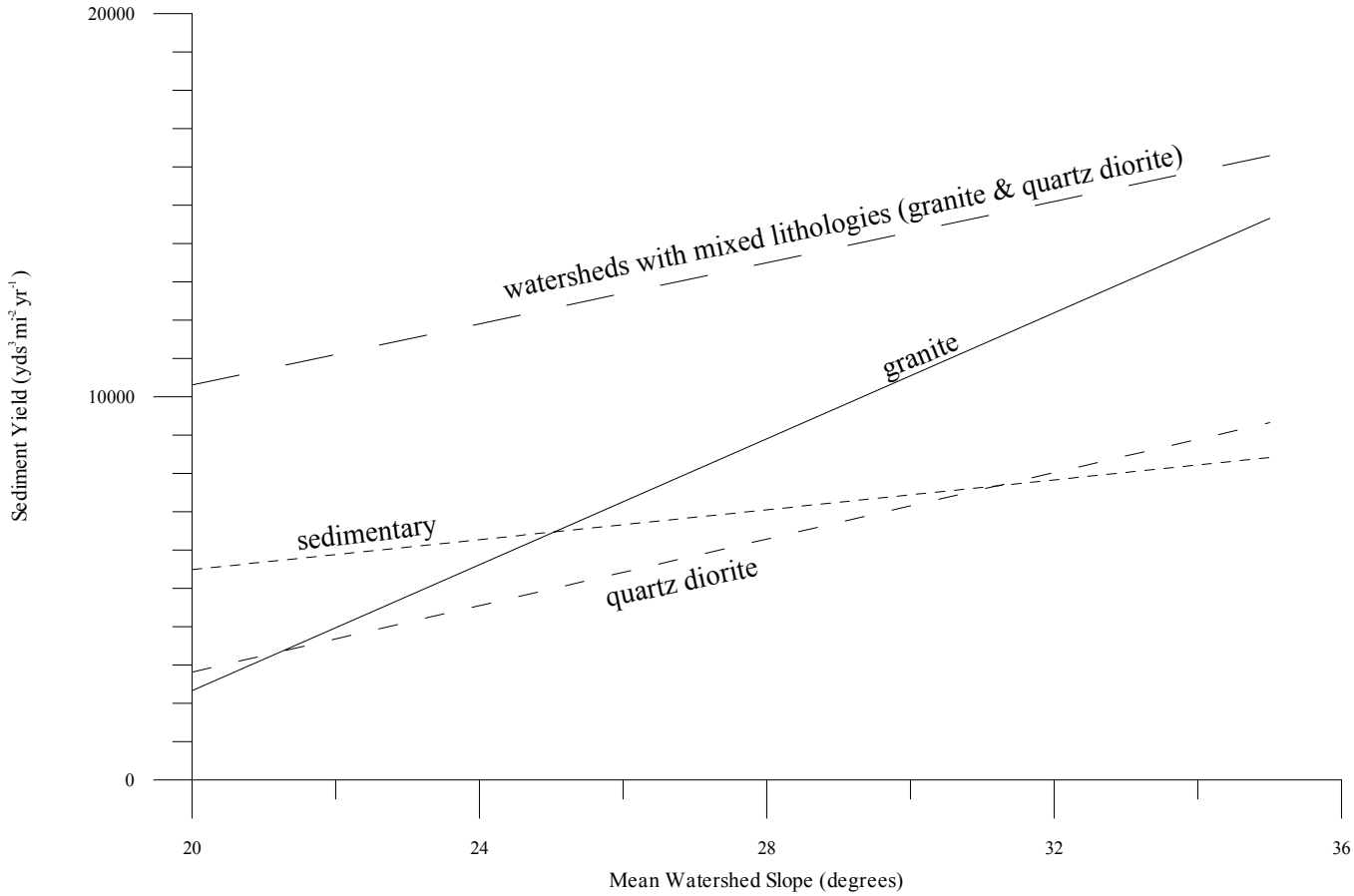


Figure 11 Erosional Sensitivity to Changes in Slope & Lithology
Sediment Yield for Los Angeles County Debris Basins with at least a 20 year record
(lines are best fit curves of the raw data)

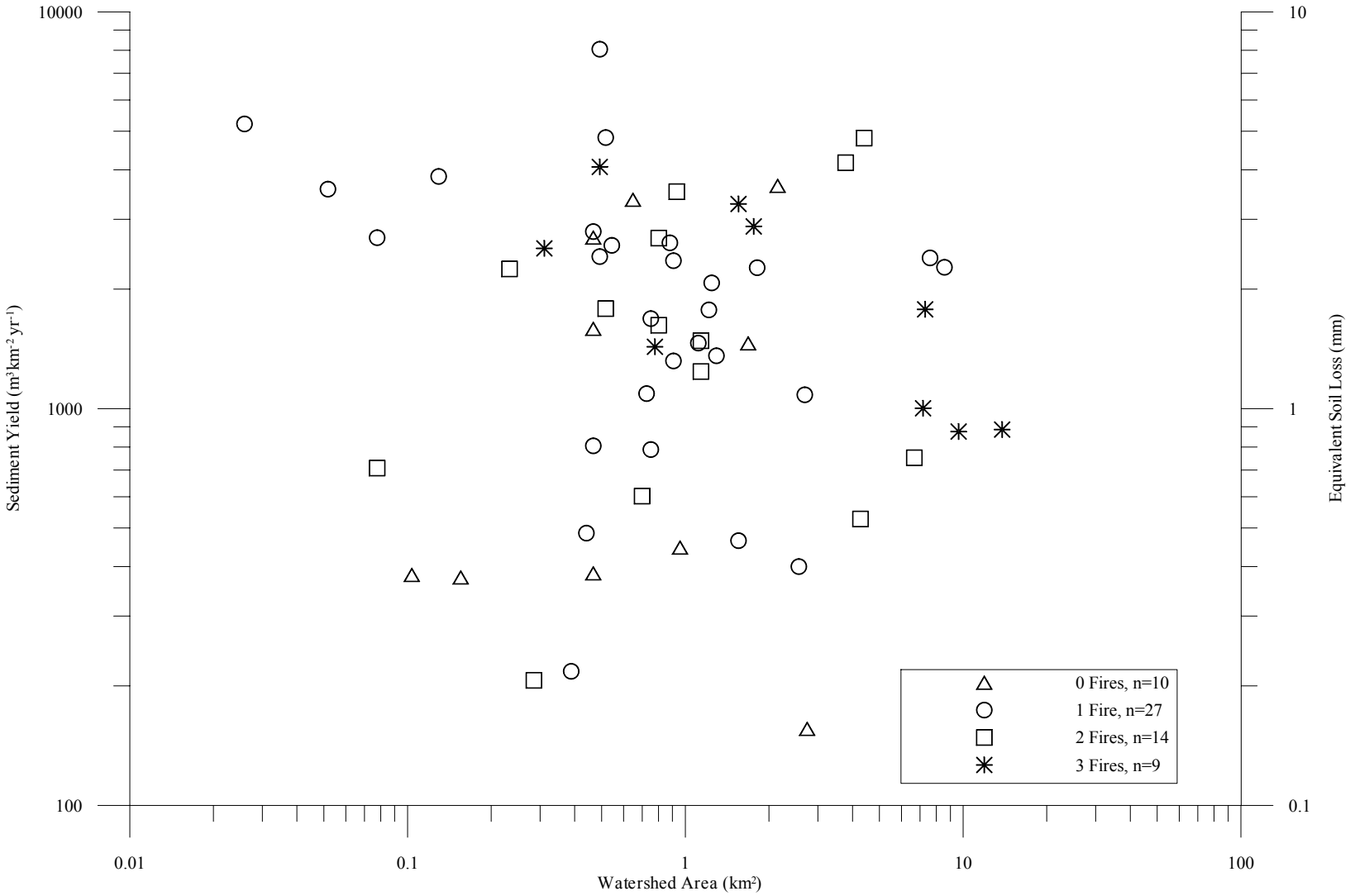


Figure 12 Sediment yield as a function of fire history
(debris basins have at least a 20 year sediment record)

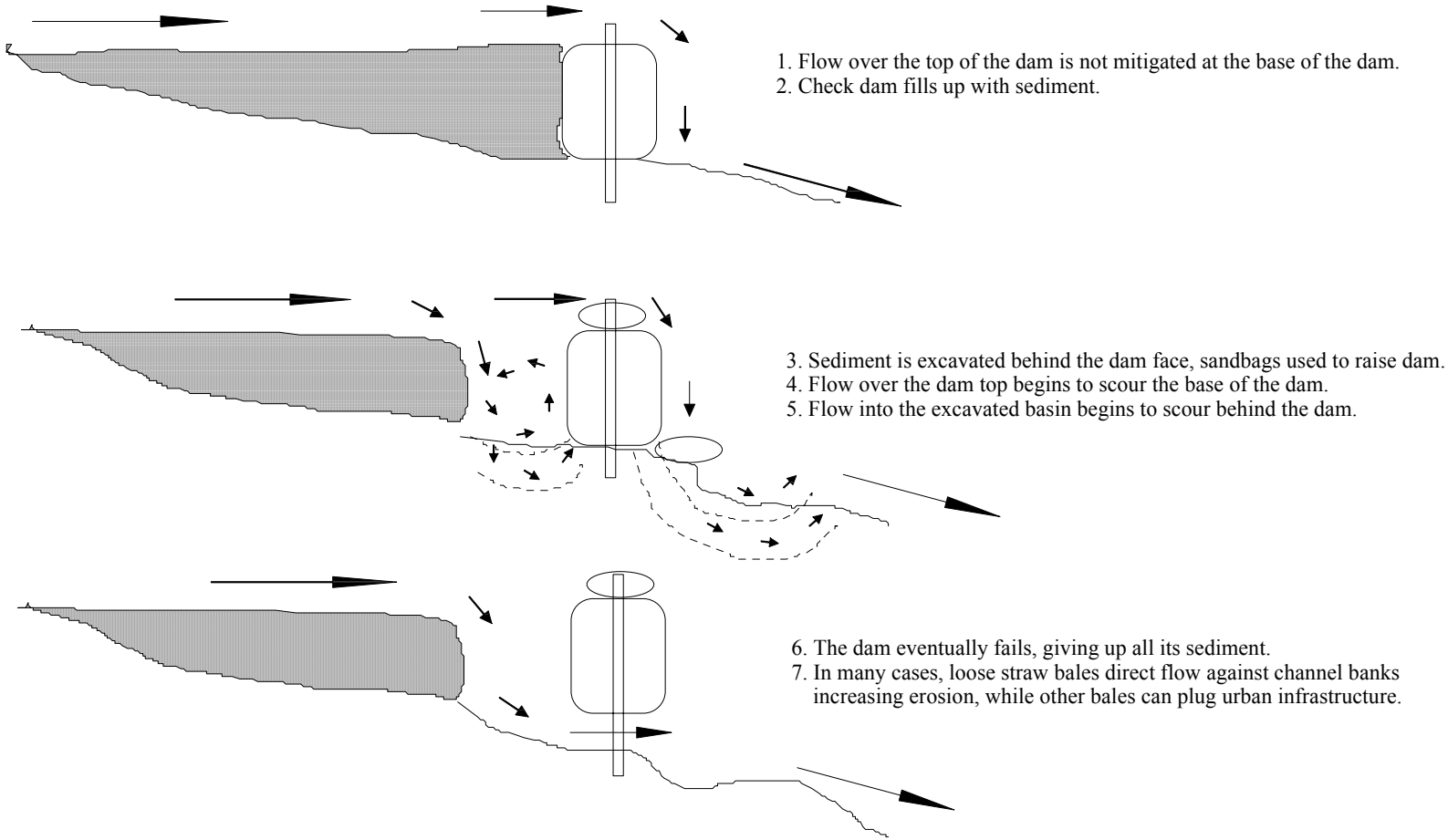


Figure 13 Excavation of Straw Bale Check Dam Leads to Failure

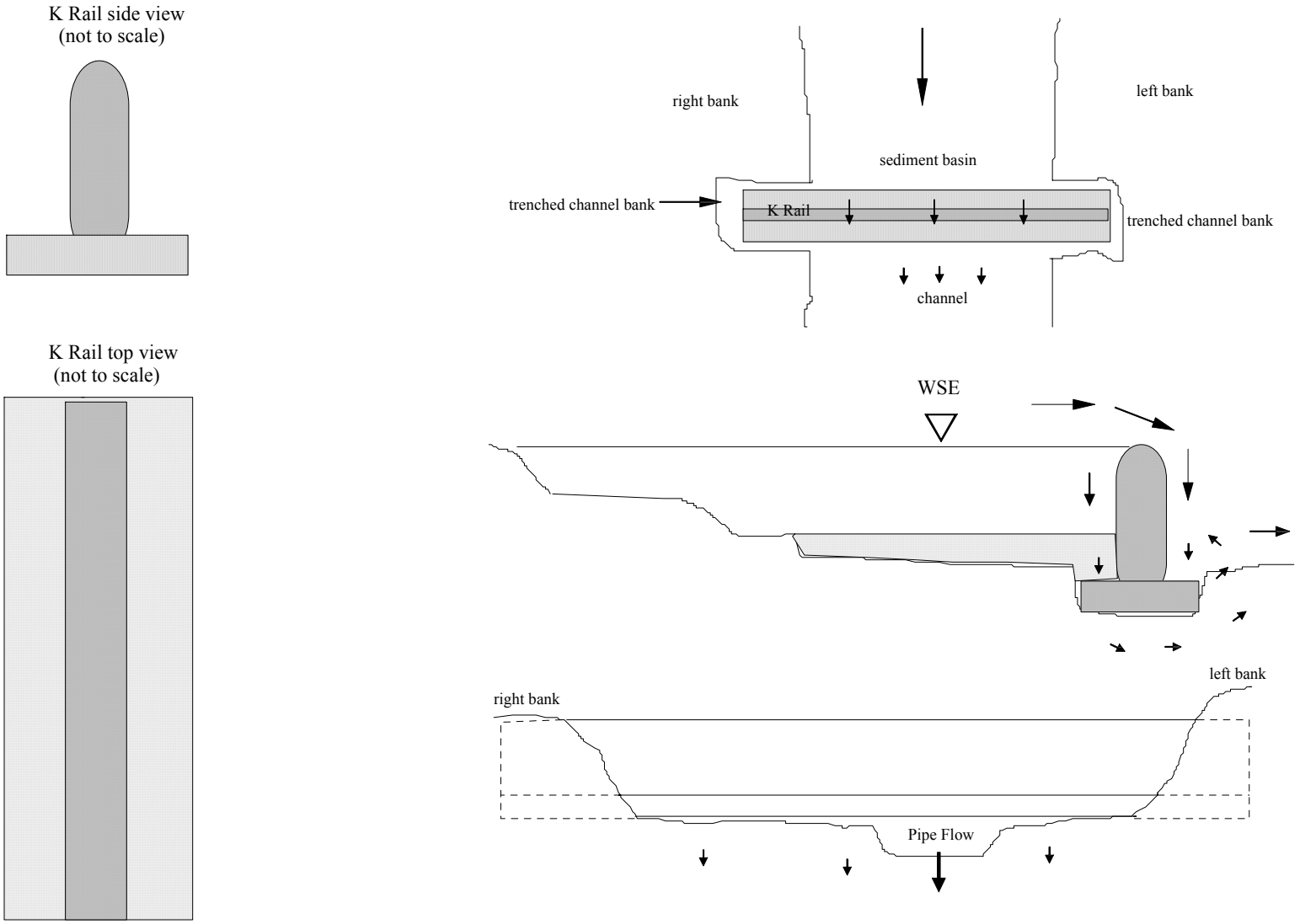
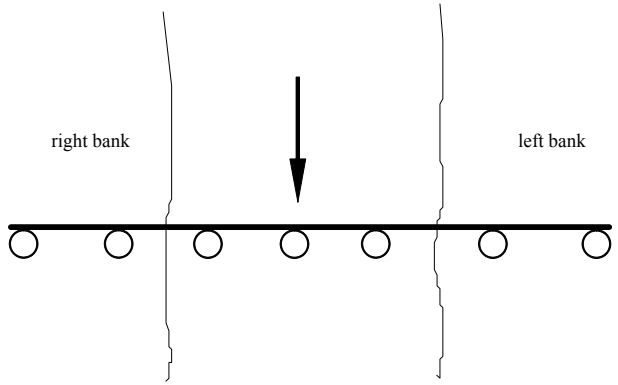
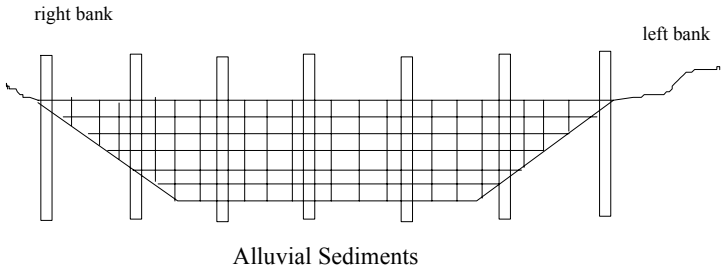


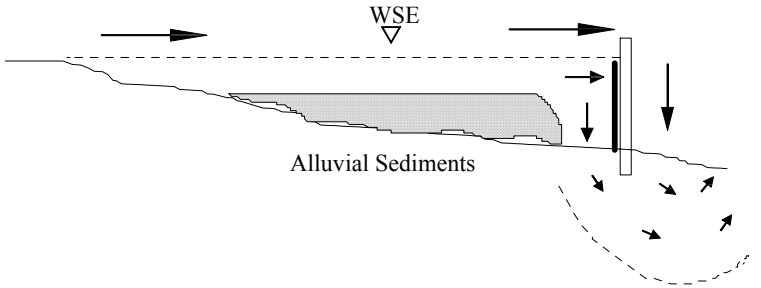
Figure 14 K Rail structures as used at Laguna Beach.

1. Steel posts and hog wire with silt netting hung on the upstream face.





2. Sediment is deposited behind dam in the stillwater.
3. Flow backs up behind debris fence as exfiltration through silt netting is less than watershed discharge.



3. Force is applied by channel flow and ponded water to the debris fence.
4. This force exceeds the reisting forces of non-cohesive alluvial sediments.
5. Fence is pushed over, or head difference on either side of fence results in pipe flow.

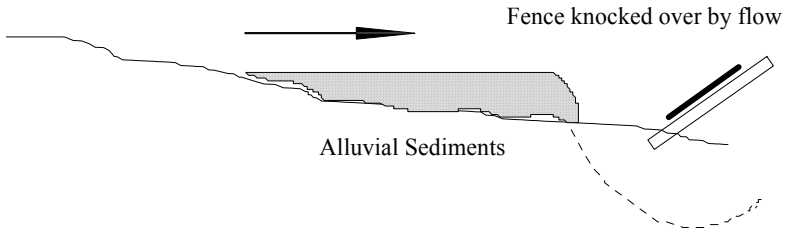


Figure 15 Debris Fence with Hog Wire and Silt Netting Across Upstream Face