

H1-1-A-1 INVITED PAPER

COMMON AND UNCOMMON SENSE ABOUT  
EROSIONAL PROCESSES IN MOUNTAIN LANDS

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Current knowledge of erosional processes in mountainous watersheds is reviewed with emphasis on the west coast of the United States. Appreciation of the relative magnitude of erosional processes may be distorted by the tendency for researchers to study "problems" and by the relatively short time span of their records. The importance of various linkages between processes depends on climate, soil, topography, and the nature of site disturbances. Understanding of these linkages is severely restricted by the brief span of our investigations.

This paper will focus on situations where understanding is sought in order to predict the consequences of various activities or to ameliorate damages -- either by modifying activities or by corrective actions. In these two circumstances it is crucial that the objectives of an investigation or activity be clearly defined. Is erosion control sought to conserve the soil resource or to protect water quality? Each objective leads to a different set of priorities in the appraisal and management of erosion and carries its own technical limitations. More importantly, each objective is affected differently by various social and political constraints surrounding erosional problems. These social and political limitations may be a greater impediment to effective management of erosion than are technological limitations.