

## Key Words for Debris Flow Hazards and Processes

(i.e. check the notes, book, and readings to make sure you know the significance of these terms)

### ***Landforms***

hillslope  
hollow  
debris fan  
hillslope gradient  
channels

### ***Process***

weathering  
mass wasting  
    slide  
    flow  
    creep  
    slump  
debris flow  
flow processes  
    normal water flood  
    hyperconcentrated flow  
    debris flow  
lahar

### ***Material***

weathered mantle  
    regolith  
    colluvium  
sediment texture  
    clay  
    silt  
    sand  
    gravel  
volcaniclastic  
diamicton  
matrix  
woody debris

### **Physics Principles**

velocity  
density  
granular solids  
viscous fluids  
buoyancy  
shear strength  
dispersive pressure

pore pressure  
sediment porosity  
pore fluids  
atmospheric pressure  
positive pore pressure  
negative pore pressure  
dilation  
liquefaction  
shear strength  
cohesive  
non-cohesive  
soil strength  
root strength

### ***Debris Flow Features***

snout  
high friction gravel rind  
lobe  
superelevation  
levee  
sediment bulking  
rapidly moving landslides  
channel erosion  
channel deposition  
stream alteration  
head scar  
transport zone  
runout zone  
woody debris dam

### ***Debris Flow Occurrence***

rate of colluviation  
hollow filling  
recurrence interval  
clear cutting  
triggers  
    meteorologic  
    seismic  
    anthropogenic  
        road cut  
        loading  
rainfall intensity  
hazard - likelihood of occurrence

Risk - degree of consequences  
Debris Flow Hazard Mitigation  
    Engineered Solutions  
    structures / diversions  
Planning Solutions