Table 14. General Guidelines for Broad Level High Risk of Mass Wasting Potential (slump-earthflow) (debris avalanche – debris torrent) (WRENSS, EPA, 1980)

Identification of Unstable Terrain Associated With Mass Wasting (use air photos, topographic maps and geologic maps)

Guideline for Various Slopes	Slump Earthflow	Debris/Avalanche, Debris Torrent
Landform features	2° → Steep	Steep
Slope gradient	Hummocky	Concave
Slope shape	Irregular	
Soil Characteristics	Deep	Shallow
Depth	Deeply weathered	Residual or colluvium
Type	Fine grained	Coarse-grained
	Presence of mica	
	High clay content	
Hydrologic Characteristics of Site		
Concentration of ground water	Saturated depressions	Linear depressions perpendicular to the slope
	Bowls	
	Springs	
	"Elk wallows"	
Rock Type	Volcanic ash	Hard, resistant volcanic rock
	Breccias	Granites
	Silt sandstones	Diorites
	Mudstones	
	Highly weathered rock	
	Attitude (dip of beds, parallel to slope)	
Vegetative Cover	Indication of wet clear cuts increase risk. Old age new stands indication of activity	Rooting depth impacts
	Leaning trees	
Precipitation	High intensity	
	Long duration	

Risk Rating:

Any surface disturbance activities that occur on high risk hazard for mass-wasting (slump-earthflow) and/or debris avalanche/debris torrent that influence vegetative cover, flow interception and routing, such as stand conversion, roads, skidding and yarding, land clearing and related activities is to be considered as a high risk for erosion potential.

Sediment delivery ratings for potential sediment contribution must be evaluated using the relations in Figure 80, Figure 81, and Table 15.