

General Description:

These very steep slopes leading up to the Blue Range plateau are clearly visible in the distance to the east, from the highway at Taggerty. Granitic outcrops are common and the soil varies considerably in depth. Tree roots penetrate into the weathered zone and along the jointing planes of the underlying bedrock. The slopes are inherently unstable and the hazard of mass movement increases dramatically with clearing and excavating activities.

Site characteristics:

Site No. 77

Parent material		Depth to seasonal			
Age:	Devonian	watertable:	> 5 m		
Lithology:	Granodiorite	Potential recharge			
Landform		to groundwater:	Low *		
Pattern:	Plateau	Flooding risk:	Nil		
Element:	Scarp	Drainage:	Rapidly drained		
Slope		Depth to hardrock:	Variable; 0 - 1.5 m		
Common:	55%	Rock outcrop:	50%		
Range:	50-60%	Annual rainfall:	1090 mm		
Native vegetation: Narrow-leaf Peppermint, Messmate, Silver Wattle, Common Cassinia					
Present land use:	Recreation, native forest				

* Granitic areas do not have a high 'recharge' capacity despite high permeabilities of the soil profile (P.R. Dyson - pers. comm.)

Land degradation:

Degradation	Water e	rosion	Wind anazian	Calting	Asidification
process	Sheet/rill	Gully	wind erosion	Satting	Acidification
Susceptibility	High	Moderate	High	Low	Moderate
Incidence	Nil	Nil	Nil	Nil	Low

Soil profile characteristics:

Permeability	(measured - average, range): (estimated):	- Excessive
Available water capacity:		140 mm H ₂ O
Linear Shrinkage (B horizon):		10%

Soil profile description:

Land Unit symbol: Dgb1

A 0 - 26 cm Dark brown (7.5YR3/2) loamy coarse sand, weak subangular blocky structure, peds 5-10 mm, rough fabric, very weak consistence, few organic segregations, a few angular granitic cobbles, moderate organic matter, pH 5.7. Diffuse transition to:
B21 26 - 93 cm Reddish brown (5YR4/4) coarse sandy loam, apedal massive (structure), sandy fabric, moderately weak consistence, a few coarse angular granitic gravel, low organic matter, pH 5.9. Diffuse transition to:
B22 93 - 150 cm Reddish yellow (7.5YR6/6) coarse sandy loam, apedal massive (structure), sandy fabric, moderately weak consistence, many rounded granitic cobbles, pH 6.0.

Soil classification:

Factual Key (Northcote, 1979):Uc 5.11 - 1/0/026Australian Soil Classification (Isbell, 1992):Melanic, Mesotrophic, Red, Kandosol; medium, slightly
gravelly sandy/loamy, deepUnified Soil Group:SM

Interpretation of soil analyses (see Appendix 2 for analytical results)

Horizon	рН	Gravel %	E.C. (salts)	Nutrient status	Р	К	Al	Organic matter	Dispersibility
А	5.7	5	VL	VL	D	S	S	Н	L
B21	5.9	3	VL	VL	D	S	S	L	L
B22	6.0	5	VL	VL	D	S	S	VL	L
VL: Very Low L: Low		M	Moderate	H	High		VH: Verv H	igh	

VL: Very Low D: Deficient

L: Low S: Satisfactory M: Moderate T: Toxic H: High NA: Not Available VH: Very High ** Acidic

Land capability ratings and limitations for specific land uses:

Land use	Rating	Major limiting factor(s)			
Agriculture	C ₃ T ₅ S ₄	Very steep slopes, shallow soils and high susceptibility to sheet/rill erosion			
Building foundations					
- slab - stumps/footings	5 5	Very steep slopes, high proportion of stones and boulders, high susceptibility to slope failure			
Effluent disposal (septic tanks)	5	Very steep slopes, excessive permeability may contaminate fresh-water springs further downslope			
Farm dams	5				
Residential - rural	5	Very low capability for building foundations effluent disposal, farm dams and secondary roads			
- urban	5	Very low capability for building foundations and secondary roads			
Scenic value	2	-			
Secondary roads	5	Very steep slopes, high proportion of stones and boulders, hig susceptibility to slope failure			