

General Description:

Situated throughout the study area, these steep slopes on Devonian sandstone and siltstones have, in their natural condition, a dense forest cover which helps protect the inherently - unstable slopes from erosion and mass movement (landslips). Logging operations invariably cause increased erosion and instability, and, depending on the location, can detract from the scenic value of the area. Any land disturbance in this unit is likely to adversely affect the quality of water flowing from the catchment.

Site characteristics:

Site No. 73

Parent material		Depth to seasonal		
Age:	Devonian	watertable:	> 5 m	
Lithology:	Sandstones and mudstones	Potential recharge		
Landform		to groundwater:	Very high	
Pattern:	Steep hills	Flooding risk:	Nil	
Element:	Lower steep slopes	Drainage:	Rapidly drained	
Slope		Depth to hardrock:	< 1.0 m	
Common:	40%	Rock outcrop:	5%	
Range:	30 - 45%	Annual rainfall:	1090 mm	
Native vegetation: Broad-leaf and Narrow-leaf Peppermint, Red Stringybark, Silver Wattle				
Present land use:	Nature conservation, logging - hardwood and softwoods and minor area cleared for grazing			

Land degradation:

Degradation	Water e	rosion	Wind arosion	Salting	Acidification
process	Sheet/rill	Gully	wind erosion	Satting	Acidification
Susceptibility	Very high	Moderate	High	Low	High
Incidence	Low	Nil	Nil	Nil	Low

Soil profile characteristics:

Permeability	(measured - average, range): (estimated):	4000 (2500 - 5500) mm/day -		
Available water capacity:		140 mm H ₂ O		
Linear Shrinkage (B horizon):		10%		

Soil profile description:

Land Unit symbol: Dsb2

A 0-20 cm Very dark grey (5YR3/1) silty loam, moderate subangular blocky structure, peds 3 mm, rough fabric, very weak consistence - moist, angular gravel sandstone/siltstone fragments are common, high organic matter, pH 5.6. Clear transition to:
B 20-70 cm Yellowish red (5YR5/6) medium clay, strong subangular blocky structure, peds 6 mm, smooth fabric, moderately weak consistence - moist, angular platy gravel sandstone/siltstone fragments are common, pH 5.3. Gradual transition to:
BC 70-150 cm Yellowish red (5YR5/8) medium heavy clay, moderate subangular blocky structure, peds 8 mm, smooth fabric, moderately weak consistence - moist, angular platy gravel sandstone/siltstone fragments are fragments are abundant, pH 5.0.

Soil classification:

Factual Key (Northcote, 1979): Australian Soil Classification (Isbell, 1992):

Unified Soil Group:

Dy 2.11 - 3/2/020 Melanic Dystrophic, Red, Kurosol; medium, moderately gravelly, silty/clayey, moderately deep ML

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

Horizon	рН	Gravel %	E.C. (salts)	Nutrient status	Р	K	Al	Organic matter	Dispersibility
Α	5.6	30	VL	L	D	S	Т	Н	L
В	5.3 **	18	VL	VL	D	М	Т	М	L
BC	5.0 **	27	VL	VL	D	М	Т	L	L
VL: Very Low L: Low		M	M: Moderate H: High		: High	N VH: Very High			

D: Deficient S: Satisfactory T: Toxic NA: Not Available ** Acidic

Land capability ratings and limitations for specific land uses:

Land use	Rating	Major limiting factor(s)
Agriculture	$C_3T_5S_5$	Very steep slopes, highly susceptible to erosion
Building foundations		
- slab	5	Very steep slopes, very high susceptibility to slope failure
- stumps/footings	4	Steep slopes, high susceptibility to slope failure
Effluent disposal (septic tanks)	5	Very steep slopes, excessive permeability may result in the contamination of groundwater
Farm dams	5	Very steep slopes, very shallow soils excessive permeability, low suitability of subsoil, high susceptibility to slope failure
Residential - rural	5	Very low capability for slab foundations effluent disposal, secondary roads and farm dams
- urban	5	Very low capability for slab foundations and secondary roads
Scenic value	1 & 2	-
Secondary roads	5	Very steep slopes, high susceptibility to slope failure, low suitability of subsoil