

464351

Scarp - Poatina

This land system forms part of the eastern escarpment boundary of the study area extending from Drys Bluff to Threshermans Hill. The slopes of the escarpment are very steep on upper slopes where cliffs and boulder deposits of Jurassic dolerite are common. sedimentary rocks of the Lower Parmeener supergroup dominate on lower components although deposits of Quaternary dolerite scree of probable periglacial derivation extend across these slopes. This material is widespread in soil profiles of most components. The Lower Parmeener supergroup is composed of complex interbedded sequences of mudstone, sandstone, limestone and various glacio-marine units. Sandstone sequences often form prominent cliffs on mid slope components.

Stony, gradational brown soils are the norm in most situations. Mottled light grey to brownish yellow duplex soils are ubiquitous on lower slopes probably as a result of moisture permeating from higher positions. Boulder slopes on upper components often have organic soil accumulations between rock and boulder fragments. Jurassic dolerite seems to have a strong influence on pedogenesis (soil development) on these sedimentary soils, with the exception possibly of the lower components.

Lower slopes support *Eucalyptus amygdalina* - *E. viminalis* forest which can tolerate the stresses imposed by shallow soils and lower rainfall. *Acacia melanoxylon* and *Exocarpos cupressiformis* are widespread in the understorey on lower slopes due possibly to a low frost incidence. Wetter mid and upper slopes are dominated by *Eucalyptus delegatensis* with *Bedfordia salicina* and *Acacia dealbata* in the understorey. Forests decrease in height with altitude, reflecting a lower temperature habitat. *Eucalyptus coccifera* becomes more common at the highest sites in the land system. Boulder slopes at these altitudes may support *Nothofagus cunninghamii* thickets which are likely to form in areas that are subjected to fog drip from the often present cloud blanket.

Hydro-electric power generation and forestry are the main land uses. Rill and gully erosion are potential problems on mid and lower slopes. There is a lower sheet erosion hazard on doleritic soils. Mid slope roadside verges are prone to landslips.



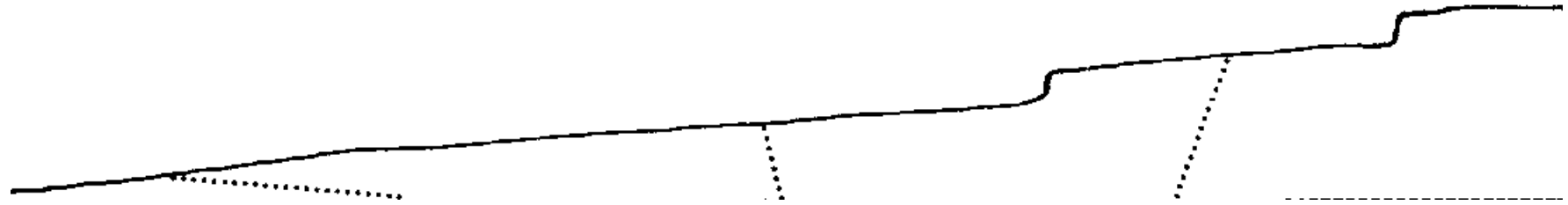
Low open forest to woodland dominated by *Eucalyptus delegatensis* and *E. coccifera* on exposed rocky upper slopes.

LAND—SYSTEM

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Area (ha):
13494



COMPONENT	1	2	3	4
PROPORTION(%)	10	40	30	20
RAINFALL (mm)	Approximate Annual Rainfall: 750-1000			
GEOLOGY	Lower Parmeener Supergroup Sediments (Upper Carboniferous to Permian) (With doleritic scree in places)			I Jurassic dolerite in places.
TOPOGRAPHY			Escarpment	
Position	Footslopes	Lower Slopes	Mid Slopes	Rocky Upper Slopes
Typical Slope()	5-7	7-10	30	30-70
NATIVE VEGETATION				
structure	Open Forest	(Tall) Open Forest	(Tall) Open Forest	Open Forest/Woodland
Floristic Association (See Appendix 1 for common names)	Eucalyptus amygdallna E. viminalis E. obliqua E. rubida Acacia dealbata Helichrysum dendroideum Daviesia latifolia	Eucalyptus delegatensis E. obliqua E. amygdallna E. viminalis Acacia dealbata A melanoxylon Exocarpos cupressiformis Cyathodes parvifolia Olearia lirata Pultenaea gunnli Gahnia grandis Juncus sp. Pteridium esculentum	Eucalyptus delegatensis Acacia dealbata Banksia marginata Bedfordia salicina Cyathodes parvifolia Helicbrysum dendroideum Lomatia tinctoria Olearia vlscosa	Eucalyptus delegatensis E. cocclifera Nothofagus cunninghamii Bedfordia salicina Acacia dealbata Cyathodes parvifolia Lomatia tinctoria Lissanthe montana Orites acicularis
SOIL Surface(A) Texture	Clay Loam	Clay Loam	Clay Loam	Clay Loam
B Horizon(subsoil) Colour (wet) texture and primary profile form	Stony, gravelly, dark greyish brown (10 YR 4/2) silty clay loam. Uniform.	Stony, gravelly, mottled light grey (10 YR 7/1) to brownish yellow (10 YR 6/6) light medium clay. Duplex.	Stony, gravelly, strong brown (7.5 YR 5/8) sandy clay. Gradational.	Very stony, gravelly, strong brown (7.5 YR 5/6) light clay. Gradational.
Permeability	Moderate	Moderate-Low	Moderate	Moderate
Typical depth(m)	0.30	>1.50	0.50	>0.40
Depth(A)Horizon(m)	0.15	0.30	0.05	0.10
LAND USE	Hydro-electric power generation, forestry			
HAZARDS	Moderate to high rill and gully erosion, low sheet erosion			Low sheet erosion