

633351

MT ROLAND

The mountainous ridge of Ordovician, siliceous conglomerate lying approximately E.-W., just north of Mole Creek is a branch of similar chains of country associated with the Cambrian troughs (see geology chapter).

A prominent feature of this imposing land system is the steep, bare rock faces of the upper slopes. Very gravelly and infertile grey, shallow soils with accumulations of peat have developed on the siliceous parent material. Deeper brownish yellow to strong brown gradational soils have developed on isolated areas of Cambrian rock.

The native vegetation is mostly a heath and shrubland although black peppermint forms a sparse tree layer on the footslopes and a forest of black peppermint and stringybark grows on the isolated areas of better quality soils.

Mt Roland land system is an important zone of nature conservation and forms an integral part of the Forth River Hydro-Electric development. The narrow gap where the Forth River crosses the system is the site of the dam which impounds Lake Cethana.

The steep topography confers on this land system, a high to moderate soil erosion hazard, which is accentuated by the erodible nature of most of the soils.



Mountainous ridges of Ordovician, siliceous conglomerate.

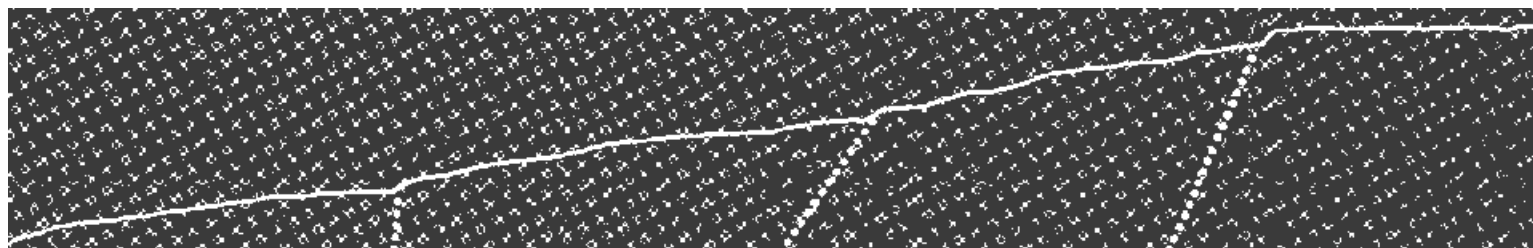


Steep bare rock faces are a feature of the system.

LAND SYSTEM

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Mt Roland



COMPONENT	1	2	3	4
PROPORTION %	25	30	25	20
CLIMATE	Average Annual Rainfall 1 250-1 500 mm			
GEOLOGY	Ordovician siliceous terrestrial conglomerate, quartzwacke and siltstone			
	Scattered periglacial boulders of conglomerate			
	Cambrian parent material			
TOPOGRAPHY	Mountain ranges trending approximately E-W			
Land form	Mountain ranges trending approximately E-W			
Position	Scree slopes	Midslopes	Steep scarps	Crests, plateaux
Average Sideslope °	7	30	70	5
NATIVE VEGETATION	Woodland, open heath			
Structure	Woodland, open heath	Open forest	Low shrubland	
Association	Black peppermint, manuka, <i>Acacia mucronata</i> , <i>Leucopogon ericoides</i> , honeysuckle, prickly beauty, heath, bracken	Black peppermint, stringybark, manuka, golden pea, prickly beauty, heath, bracken	Heath, manuka, <i>Leucopogon ericoides</i> , black peppermint	
SOIL	Very gravelly, grey (5 YR 5/1) sand soil, uniform texture	Gravelly brownish yellow to strong brown gradational soil	Very gravelly, dark greyish brown (10 YR 4/2) organic loam, rock outcrop predominant	Organic soil, rock outcrop common
Surface Texture	Gravelly peaty sand	Gravelly sandy loam	Gravelly peat	Peat
Permeability	High	Moderate	High	
Average Depth m	0.4	1.0	Skeletal	0.3
PRESENT LAND USE	Nature conservation, hydro-electricity reservoirs, gravel stripping			
HAZARDS	High sheet and gully erosion		Moderate rock falls	Moderate sheet, rill erosion