828251

MARSDEN RANGE

This land system with steep, forested slopes stretches along the eastern shore of Lake Gordon to the Marsden Range. Sediments of Cambrian age cover most of the area with some small dolerite and basalt bodies.

Organic soils often overlie mineral soils which vary with the geology (see diagram). Components covered by rainforest have shallow reddish brown peats, often with a high litter content, over mineral soil and occur on cooler western slopes. In contrast *Eucalyptus obliqua* and E. *delegatensis* tall open forest has developed on some relatively warm northern slopes (e. g. Mt Wedge). Slopes with gravelly soils have open to closed scrub dominated by *Eucalyptus nitida*, *Leptospermum* spp., and *Melaleuca squarrosa*.

At present forestry is the main land use in the land system. Some areas of rill erosion were observed during field work and extensive clearing could result in rill, gully and sheet erosion with landslips a possibility.

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Area(ha): 19075

5		
00-600	APPROXIMATE ANNUAL RAINFALL (mm) 2000-2500	

ALTITUDINAL	300-600	00-600 APPROXIMATE ANNUAL RAINFALL (mm) 2000-2500		
SITE NO. /ALTITUDE m) /ASDECT	61/340/W	(59/400/W) (60/360/W)	(37/480/N) (62/360/W)	68/600/SE
TOPOGRAPHY		Mountainous area with t	steep slopes	
Position	Protected gully	Slopes on conglomerate and	Slopes on mudstone	Protected slope
Typical Slope(5-10	20-40	15-20	5-15
Proportion (%)	2Q	10	40	30
GEOLOGY	Interbedded Cambrian sediments with some basalt and dolerite			
NATIVE	Closed-forest	Open to closed-scrub	Open to tall open-forest	Closed-forest
Structure				
	Nothofagus	Eucalvptus nitida	Eucalyptus obliqua	Nothofagus cunninghamii
Floristic	Atherosperma moschatum	leptospermum nitidum	E. delegatensis	Atherosperma moschatum
Association	Phvllocladus	L. glaicescens	E. nitida	Eucrtypia lucida
(See Appendix 1	Eucrychia lucida	Melaleuca squarrosa	Nothofagus cunninghamii	Anopterus glandulosus
for common	Dicksonia antarctica	Agastachys odorata	Eucryphia lucida	Prionotes cerinthoides
names)	Histipteris incisa	Monotoca glauca	Acacia melanoxylon	Orites diversifolia
	Polystichum proliferum	Cyathodes. glauca	Phyllocladus aspleniifolius	
	Grammitis billardieri	Aotus ericoides	Phebalium squameum	Richea pandanifolia
		Gvmnoschoenus	Zieria arborescens	Phyllocladus aspleniifolius
		Epacris lanuginosa	Gahnia grandis	
		E. impressa	Dicksonia antarctica	
		Schoenus tenuissinus	Monotoca glauca	
SOIL	Dark reddish brown	Reddish black (10 R 2.	Reddish brown (5 YR 4/4)	Dark brown (7. 5 YR
Surface(A or	(5 YR 2. 5/2)	5/1) or black (7. 5 YR	or brownish yellow (10 YR	3/2) Litter peat
P horizon	"litter" peat	2/0) fibrous peat	6/8) clay loam sometimes	[7, 2, 12002 Four
)Colour	Treed peac	2707 Hibroub peac	over a light brownish grey	
Subsoil (or B	Black (10 YR 2/1)	Gravelly black (5 YR	Yellowish red (5 YR	Gravelly, brown/dark brown
horizon) colour	clay loam over a	2. 5/1) to very dark	4/6) light clay	(7. 5 YR 4/2) sandy clay
(moist) and	dark yellowish	grey (10 YR 3/1) clay		over a yellowish brown (10
Primary Profile form	Duplex	Uniform	Uniform Gradational	Gradational
Depth surface	L) 0.05	0. 05	0.60	0.05
Typical total depth (m)	>0. 60	0.30-0.60	>1. 00	>0. 50
Permeability	low	Moderate	Moderate	Moderate
LAND USE		Forest		
HAZARD		rv	erosion and high landslip risk	16 7 7