772351

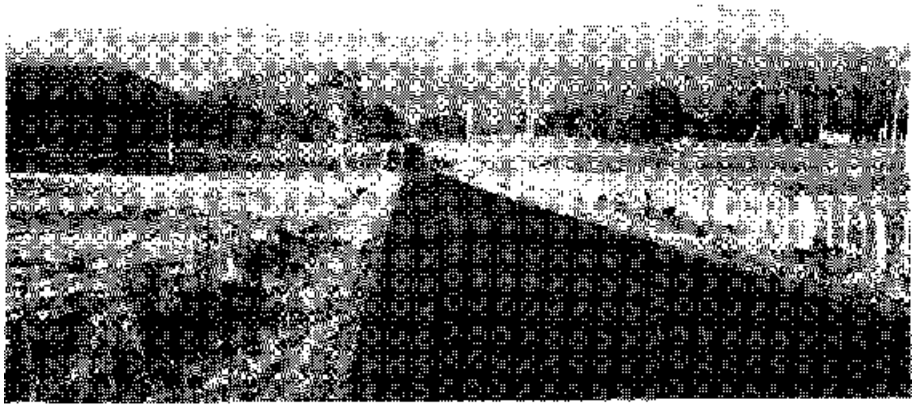
Scarp - Great Western Tier

Stretching across the northern boundary of Region 5 is the Scarp - Great Western Tier Land System. It extends from the slopes of Western Bluff in the west past Mother cummings Peak in central areas to the slopes of Drys Bluff in the east. It includes areas of land around Quamby Bluff and Cluan Tiers. The entire land system consist of three slope components which have a general concave form and constitute the escarpment (northern) of the Great Western Tiers. Although most of the land system is underlain by sedimentary rocks of the Parmeener Supergroup, doleritic boulders occur across the whole slope and often dominate on the surface. These boulders may concentrate in places to form extensive boulder slopes devoid of vegetation. The boulders have fallen from cliffs, common on upper slopes, due to weathering processes such as freezing and thawing during recent (Pleistocene) glacial times. They are likely to have moved further downslope by solifluction process (i. e. the movement downslope of rock waste and associated weathered forms as a saturated mass).

Dolerite boulders in the soil profile have probably influenced the development of soil textures and colours. Most have yellowish brown gradational profiles although duplex soils occur on lower slopes. Topsoil textures vary from sandy loams to clay loams whilst B horizons have sandy clay or light clay textures. All soils are very stony and are usually deep.

These relatively fertile slopes with a high rainfall support wet sclerophyll forest which grade to mixed forest. Important species include Eucalyptus delegatensis, E. obliqua, E. dalrympleana and Nothofagus cunninghamii with understorey species including Acacia dealbata, Bedfordia salicina, Leptospermum lanigerum, Zleria arborescens, Pomaderris apetala and Phebalium squameum. Drier north facing slopes in the Quamby Bluff area support E_. amygdallna forest. Athrotaxis cupressoides occurs in protected situations. Forests give way to woodland at higher altitude where Eucalyptus coccifera dominates with Nothofagus cunninghamii dwarf 'elfin' forest.

Land use in the region is restricted to forestry and recreation. It is also a region of high scenic value. Land degradation hazards include low to medium sheet erosion and medium rill, gully and landslip hazards.



Slopes of the Scarp-Great Western Tier Land System in the far distance. Upper slopes are snow covered and Western Bluff is on the right of the photograph. View from Union Bridge on the Mersey River.

LAND SYSTEM

Scarp-Great Western Tier

772351

COMPONENT	1	2	3
PROPORTION(%)	25	35	40
RAINFALL (mm)		Approximate Annual Rainfall: 1500-2000	
GEOLOGY	Jurassic dolerite - strong influence on soil colour and texture		
	(Extensive scree slopes occur in places across all components)		
	Lower Parmeener, dolerite scree	I Upper Parmeener, dolerite scree	i Jurassic dolerite and scree
TOPOGRAPHY		Mountainous escarpment	
Position	Lower Slopes	Mid Slopes	(Boulder) Upper Slopes/Cliffs
Typical Slope(°)	15	15-30	15-60/90
NATIVE VEGETATION			
Structure	Tall Open Forest - Open Forest	Tall Open Forest/Open Forest	Low Open Woodlands
Floristic Association (See Appendix 1 for common names)	Eucalyptus delegatensis E. dalrympleana E obliqua Acacia dealbata A. verniciflua Nothofagus cunnlnghamii Pomaderris apetala Dicksonia antarctica Bedfordia salicina Cassinia aculeata Pultenaea juniperina Lomatia tinctoria Cyathodes parvifolia	<› Eucalyptus delegatensis 1. dalrympleana E. obliqua Nothofagus cunnlnghamii Atherosperma moschatum Leptospermum lanlgerum Phyllocladus aspleniifolius Acacia dealbata Pomaderris apetala Bedfordia salicina Zierla arborescens Telopea truncata Hakea lissosperma Monotoca glauca Oxylobium	Eucalyptus cocclfera Nothofagus cunninghamii 6rltes revoluta Drimys lanceolata Trochocarpa gunnii Hakea epiglottis Gaultheria hispida Olearia phlogopappa Cyathodes parvifolia
SOIL Surface(A)Texture	Sandy Loam-Silty Loam-Clay Loam	Sandy Clay Loam-Clay Loam-Silty Clay Loa	m Loam-Silt Loam
B Horizon(subsoil) Colour (wet) Texture and primary profile	Stony, gravelly, dark yellowish brown (10 YR 4/4) to brown/dark brown (7. 5 YR 4/4) to yellowish red (5 YR 5/8) silty clay loam to sandy clay to light	Gravelly, strong brown (7. 5 YR 5/6) to dark yellowish brown (10 YR 4/6) sandy clay to light clay. Gradational.	Stony, gravelly, dark yellowish brown (10 YR 4/6) sandy clay loam to sandy clay. Gradational
Permeability	Moderate	Moderate	Moderate
Typical depth(m)	1. 00-2. 00	1. 00-1. 50	>1. 00
Depth(A)Horizon(m)	0. 10-0. 30	0. 50-0. 20	0. 20
LAND USE		Forestry, recreation	
HAZARDS	Low to medium sheet erosion with medium rill, gully and landslip hazards		