

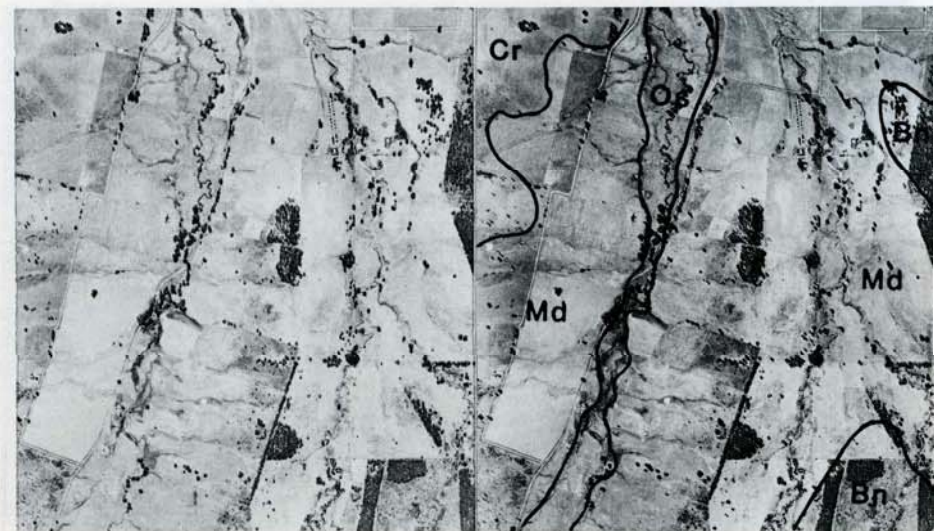
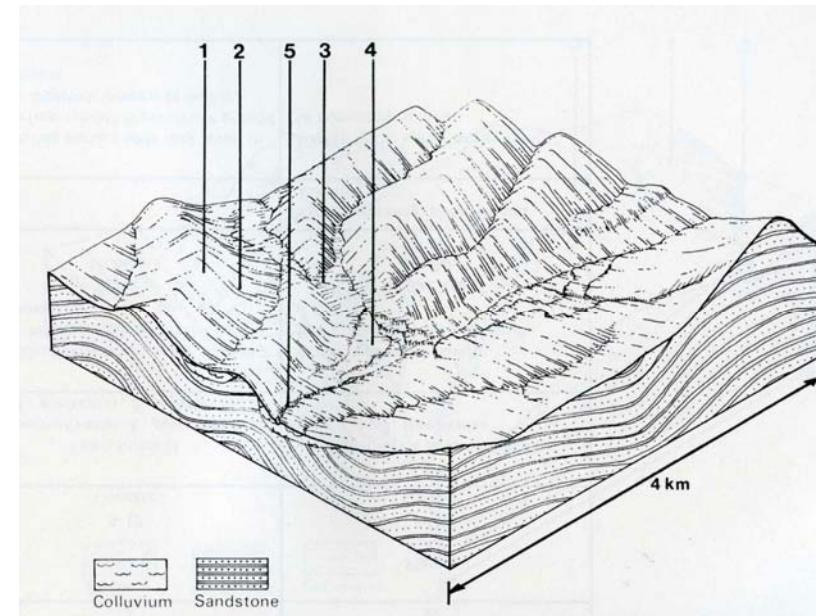
7.17 Myrtleford land system

This land system consists of broad valley bottoms in the northern part of the study area. Alluvial-colluvial fans predominate, with a lesser proportion of low hills and old alluvial terraces. Although the predominant rocks are Ordovician sediments, granite occurs in the Mudgeegonga areas and in the Buffalo valley west of Mount Buffalo, and Upper Devonian rhyolite and rhyodacite occur in the far west. Annual rainfall is moderate. Summers are warm to hot and dry, and winters are cool and wet, with frosts from mid autumn to late spring.

Red duplex soils with smooth ped fabric dominate on the less-steep upper surfaces, and yellowish brown duplex soils on wetter areas. The steeper slopes have weakly bleached reddish brown gradational soils, and gravelly loam soils occur on steep fan deposits adjacent to the steeper land systems. Reddish brown and yellowish brown gradational soils on alluvium occur to a limited extent.

Vegetation varies from open forest of *Eucalyptus macrorhyncha*, *E. polyanthemos*, *E. dives* and *E. goniocalyx* to *E. radiata* and *E. rubida* in moister areas.

Occasional gully erosion occurs within the land system. The hard-setting surface of most of the soils is the main critical land feature, which could lead to increased surface run-off and soil erosion.



MYRTLEFORD LAND SYSTEM Area 553 sq km

CLIMATE Rainfall, mean (mm) Temperature, mean (°C) Seasonal growth limitations	Annual 750-1000; lowest January (40-50), highest June (100-120) Annual 14; lowest July (7.5), highest January (21) Temperature – less than 10°C (av): June-August Precipitation – months less than 50% frequency of effective rain. January-February				
GEOLOGY Age, lithology	Ordovician greywacke, sandstone, siltstone, shale, mudstone				
PHYSIOGRAPHY Landscape Elevation range (m) Relative relief (m)	Broad valley bottoms – low residual hills and fans 230-350 60				
LAND COMPONENT Percentage of land system	1 30	2 10	3 40	4 15	5 5
PHYSIOGRAPHY Land form Position on land form Slope range (%) Slope shape	Residual hill Upper slope 5-15 Convex	Residual hill Steep lower slope 10-25 Linear	Fan Upper (older) 2-10 Linear-convex	Fan Lower (younger) 2-8 Concave	Terrace - 1-5 Linear
NATIVE VEGETATION Structure Dominant species	Open forest II to III <i>E. macrorhyncha, E. polyanthemos, E. dives, E. goniocalyx to E. radiata, E. rubida</i>				Woodland <i>E. camaldulensis</i>
SOIL Parent material Description Surface texture Permeability Depth (m)	<i>In situ</i> weathered bedrock Red duplex soils with smooth ped fabric Loam Moderate 1.5	Colluvial mantle over weathered bedrock Weakly bleached reddish brown gradational soils Loam High 1.0	Quaternary alluvium-colluvium Reddish brown gradational soils with rough ped fabric Loam High 1.5	Quaternary alluvium-colluvium Weakly bleached yellowish brown gradational soils Loam Moderate 1.5	Recent alluvium Brown and grey loam soils Loam Moderate 1.5
LAND USE	Mostly cleared; mainly used for grazing, beef and dairy cattle and sheep; limited area used for tobacco-cropping Uncleared areas; rough grazing; local supplies of fencing timbers and shed poles				
SOIL DETERIORATION HAZARD Critical land features, processes, forms	Hard-setting surface soils may result in high surface run-off if ground cover is depleted; intensive cultivation results in further deterioration of surface infiltration capacity, with increased surface run-off; sheet erosion; gully erosion				Stream entrenchment and associated gully erosion may occur if local catchment condition deteriorates