

### 7.30 Paraparap Land System

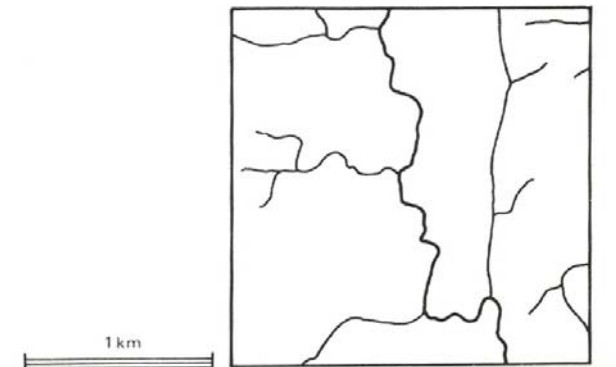
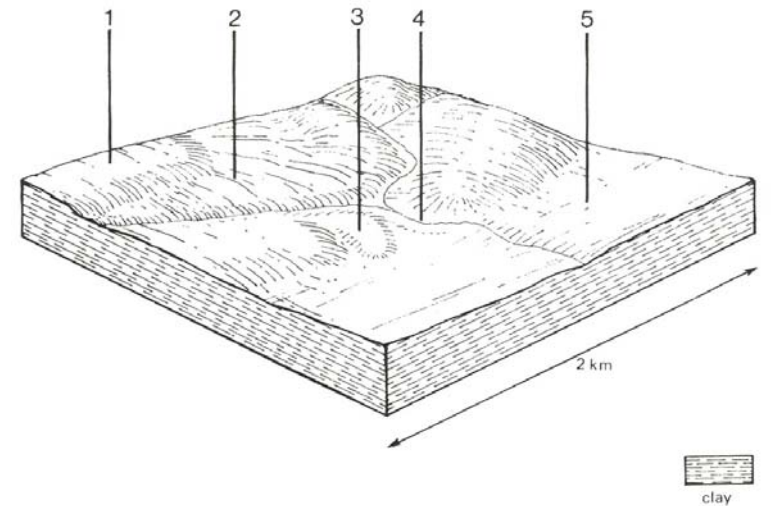
Between the lateritic plateaux of the Gherang Gherang land system and the basaltic plains of the Freshwater Creek land system, a long narrow plain extends from the Barwon River near Winchelsea to the middle reaches of Thompson Creek.

Deeply weathered duplex soils are found on most of this land system, with occasional areas of aeolian sand. Remnants of woodlands and open forests are found along many reserves with the unusual occurrence of *Eucalyptus pauciflora* on many of the better-drained and less fertile sites.

Most areas have been cleared for agriculture and, despite the fairly low rainfall, dairy farming is common. Other uses include sheep and beef cattle grazing and cereal cropping. Soil salting is a problem in many areas and some minor gully erosion has also occurred.



*Clearing has been widespread, but an abundance of vegetation in the road reserve adds an appealing dimension to the landscape.*



**PARAPARAP**

Area: 138 km<sup>2</sup>

	Component and its proportion of land system				
	1 35%	2 30%	3 10	4 15%	5 10%
<b>CLIMATE</b> Rainfall, mm Temperature, 0°C Seasonal growth limitations	<b>Annual:</b> 600 – 650, lowest January (30), highest August (65) <b>Annual:</b> 13, lowest July (9), highest February (19) <b>Temperature:</b> less than 10°C (av.) June – July <b>Precipitation:</b> less than potential evapotranspiration October – mid April				
<b>GEOLOGY</b> Age, lithology	Plio-Pleistocene sediments consisting of clayey sand, sandy clay and lateritic detritus Recent aeolian sand				
<b>TOPOGRAPHY</b> Landscape Elevation, m Local relief, m Drainage pattern Drainage density, km/km <sup>2</sup> Land form Land form element Slope (and range), % Slope shape	Gently undulating plain lying between basalt to the north and lateritic plateaux to the south 40 – 130 20 Dendritic 2.5 Gentle rise Crest, upper slope 3 (0-11) Convex				
<b>NATIVE VEGETATION</b> Structure Dominant species	Open forest <i>E. viminalis</i> , <i>E. ovata</i> , <i>E. pauciflora</i> , <i>Acacia melanoxylon</i>	Woodland <i>E. viminalis</i> , <i>E. ovata</i> , <i>Casuarina stricta</i> , <i>C. littoralis</i>	Low woodland <i>E. viminalis</i> , <i>E. obliqua</i>	Woodland <i>E. ovata</i> , <i>E. viminalis</i> , <i>Casuarina stricta</i>	Woodland <i>E. camaldulensis</i> , <i>E. viminalis</i> , <i>Acacia melanoxylon</i>
<b>SOIL</b> Parent material Description Surface texture Permeability Depth, m	Sandy clay Mottled yellow and red duplex soils Sandy loam Moderate >2	Sandy clay Yellow-brown sodic duplex soils, coarse structure Fine sandy loam Low >2	Siliceous sand Grey sand soils, uniform texture Loamy sand Very high >2	Sandy clay Yellow sodic duplex soils Sandy loam Moderate >2	Sand, silt and clay Brown gradational soils Fine sandy loam High >2
<b>LAND USE</b>	<b>Cleared areas:</b> Dairy and beef cattle grazing on mainly improved pastures; cereal cropping; some sand extraction.				
<b>SOIL DETERIORATION HAZARD</b> Critical land features, processes, forms	Low inherent fertility, phosphorus fixation and leaching of permeable A horizons leads to nutrient decline.	Dispersible subsoils are prone to gully erosion and slumping of road batters.	Low inherent fertility and high permeability lead to nutrient decline. Weakly structured surfaces with low water-holding capacity are prone to wind erosion.	Sodic subsoils with high seasonal water tables are prone to soil salting. Dispersible subsoils are prone to gully erosion.	Seasonal saline water table development leads to soil salting. Rapid surface run-off from adjacent areas leads to scouring and gully erosion. Weakly structured surface soils in poorly drained areas are prone to compaction.