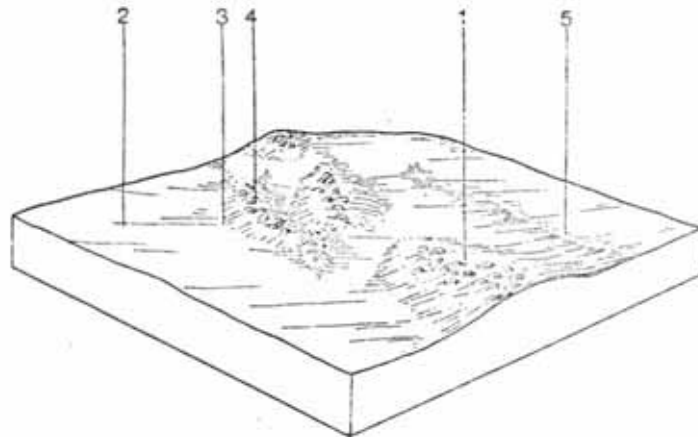


6.28 Wollert Land System

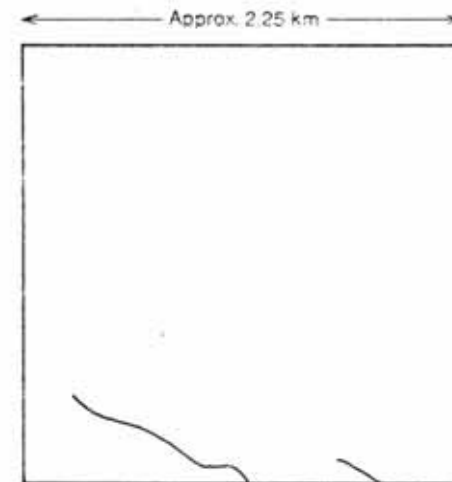
This covers 182.9 km² or 7.2% of the study area.

The stony rises are the distinctive feature of this land system being the only land system in which they occur. On the crests, these rises have shallow stony red-brown gradational soils which grade into a grey calcareous clay where the soil is deep enough. Black clay soils occur on the apron of the rises and yellow-brown calcareous sodic duplex soils on the plains.

The gradational soils are fertile but, being too shallow and stony for cultivation, are mostly left timbered. The flatter areas are cultivated but waterlogging reduces their usefulness.



Schematic Block Diagram



Drainage Pattern

COMPONENT Proportion %	1 30	2 8	3 50	4 2	5 10
CLIMATE Rainfall (av.) Temperature (av.) Seasonal growth limitations	Annual: 630-710 mm (monthly range: October 70 mm – January 45 mm) Annual: 14°C (monthly range: January 20°C – July 9°C) Temperature: less than 10°C July Precipitation less than potential evapotranspiration November - March				
GEOLOGY Age, rock	Pleistocene basalt				
TOPOGRAPHY Landscape Elevation (range) m Local relief (av.) m Drainage pattern Drainage density km/km ² Land form Slope (av.) %, slope shape	Undulating plains with stony rises 120-180 20 Dendritic 0.2 Broad crest of stony rise 9; Convex Gilgai plain 2; Straight Narrow crest of stony rise 9; Convex Apron of stony rise 3; Concave Drainage line 2; Concave				
NATIVE VEGETATION Structure Dominant species	Open woodland <i>E. camaldulensis</i>				
SOIL Parent Material Description Factual Key Surface Texture Permeability Depth (av.) m	Shallow stony dark brown clay soils, uniform texture Ug 5 Clay Low 0.5	Yellow-brown calcareous sodic duplex soils, coarse structure. Mottled yellow, grey sodic duplex soils, coarse structure Dd 1.12, Db 2.32 Clay loam Low 1.5	In situ weathered rock Shallow stony red gradational soils Gn 3.11 Loam – Clay loam High 0.3	Black clay soils, uniform texture, coarse structure Ug 5.12 Clay Low 0.8	Black clay soils, uniform texture, coarse structure Ug 5.12 Clay Low 1.0
LAND USE	Grazing occasional cropping (cereal)				
SOIL DETERIORATION HAZARD Critical land features Processes Forms	Slope gradient Overland flow, leaching Sheet erosion, nutrient decline	Slowly permeable subsoils, hard setting surfaces Overland flow, periodic waterlogging Surface compaction, sheet erosion	Slope gradient Overland flow, leaching Sheet erosion, nutrient decline	Slope gradient, slowly permeable subsoils Overland flow Surface compaction, sheet erosion	High watertable Periodic waterlogging, overland flow Surface compaction