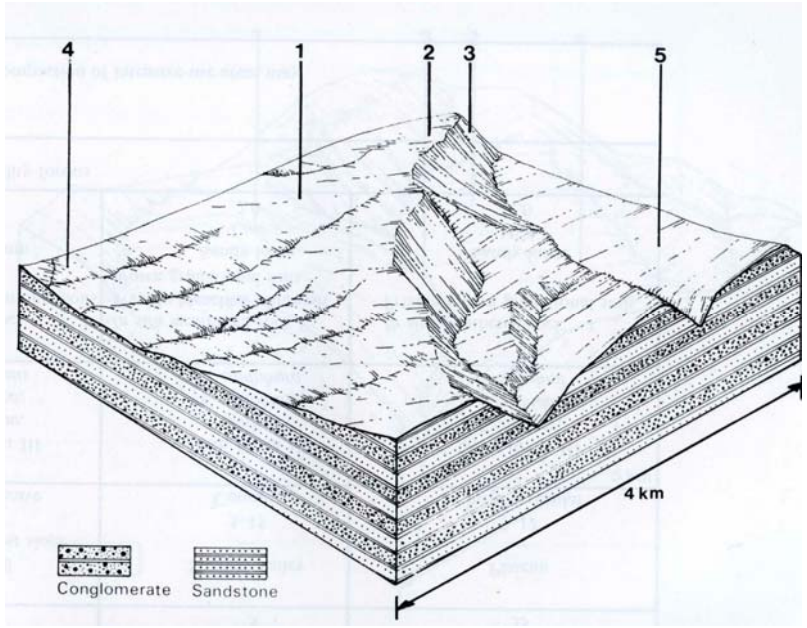
7.23 Wabonga land system

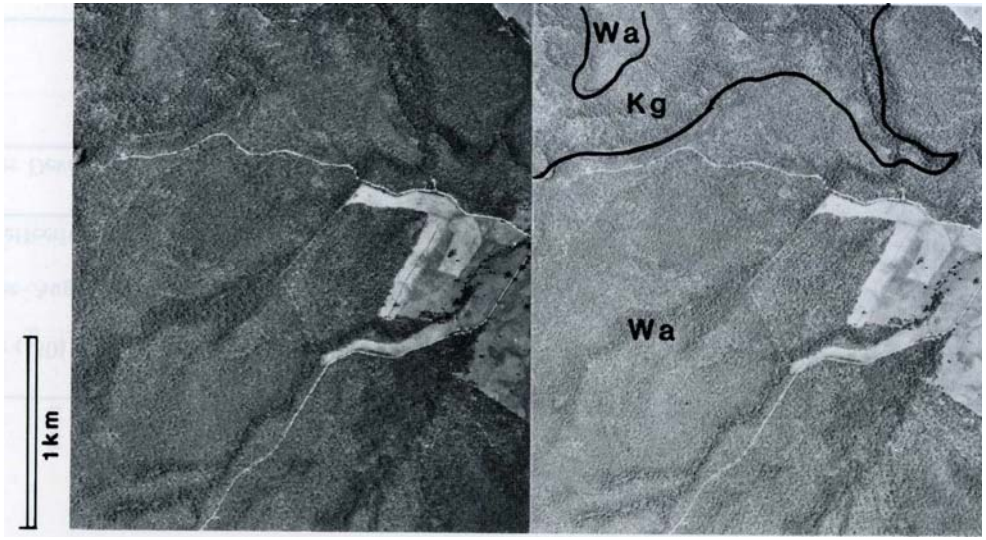
The Wabonga land system consists of several areas in the south-west of the study area. The typical landscape is gently sloping plateaux but often is limited to broad divides or small undulating plateaux and is entirely on the Lower Carboniferous sedimentary rocks. Annual rainfall, although moderate in the north, increases to high in the south. Summers are hot and dry in the north but milder in the south, and winters are generally cold and wet. Light snow may fall occasionally on the higher areas during winter.

The soils are predominantly friable brown gradational soils; the textures vary with the texture of the parent rock.

Native vegetation ranges from open forest of *Eucalyptus dives* and *E. rubida* on the drier, coarser-textured soils in the north to open forest of *E. radiata* and *E. rubida* with occasionally *E. dives*, *E. st-johnii* and small stands of *E. obliqua* on moister sites.

Soils on the coarse parent materials may have relatively low fertility and in some situations where flat-bedded rock is close to the surface may be very wet in winter. These soils are also more erodible than those on the finer-grained parent materials. Erosion of tracks is common in such areas.





WABONGA LAND SYSTEM Area 159 sq km

CLIMATE					
Rainfall, mean (mm)	Annual 1000-1250; lowest January (45), highest June (150)				
Temperature, mean (^{o}C)	Annual 12; lowest July (6), highest January (19)				
Seasonal growth limitations	Temperature – less than 10^{o}C (av): lower areas June-August, higher areas May-September Precipitation – months less than 50% frequency of effective rain. January-February				
GEOLOGY					
Age, lithology	Lower Carboniferous conglomerate, sandstone, siltstone, shale				
PHYSIOGRAPHY					
Landscape	Dissected plateau with gently dipping cuesta-form ridges				
Elevation range (m)	450-1150				
Relative relief (m)	10-250				
LAND COMPONENT	1	2	3	4	5
Percentage of land system	30	10	10	5	45
PHYSIOGRAPHY					
Land form	Gently dipping cuesta-form ridge	Gently dipping cuesta-form ridge	Gently dipping cuesta-form ridge	Shallow valley	Gently dipping cuesta-form ridge
Position on land form	Dip slope between about 800-1100m	Dip slope above about 1100m	Scarp slope	-	Dip slow below about 800m
Slope range (%)	8-15	8-15	30-50	5-12	8-15
Slope shape	Linear	Linear	Linear	Concave	Linear
NATIVE VEGETATION					
Structure	Open forest III	Open forest IV	Open forest II	Open forest III	Open forest II
Dominant species	*E. radiata, E. dives, E. rubida*	*E. delegatensis*	*E. dives, E. rubida*	*E. radiata, E. camphora, E. st-johnii*	*E. dives, E. rubida*
SOIL					
Parent material	*In situ* weathered rock	*In situ* weathered rock	Colluvial mantle over bedrock	Alluvial-colluvial mantle	*In situ* weathered rock
Description	Friable brown gradational soils	Friable brown gradational soils	Stony loam soils	Weakly bleached yellowish brown gradational soils	Friable brown gradational soils
Surface texture	Loam	Loam	Gravelly loam	Sandy loam	Sandy loam
Permeability	High	High	High	Low	High
Depth (m)	2.0	2.0	0.5	1.5	1.5
LAND USE	Mostly uncleared; timber production from better-quality forests; forest grazing Cleared area; grazing, beef cattle and sheep				
SOIL DETERIORATION HAZARD					
Critical land features, processes, forms	Intensive-use areas become compacted and surface run-off is increased; track erosion is more pronounced on coarse-textured soils;		Shallow soils with low fertility and low available water capacity	Poor drainage; may become gully-eroded	Lower soil fertility and lower available water capacity