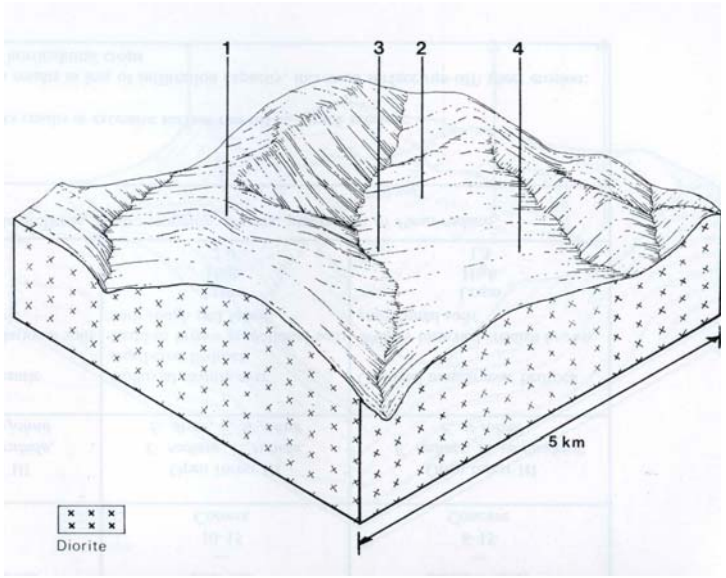
7.22 Toombullup land system

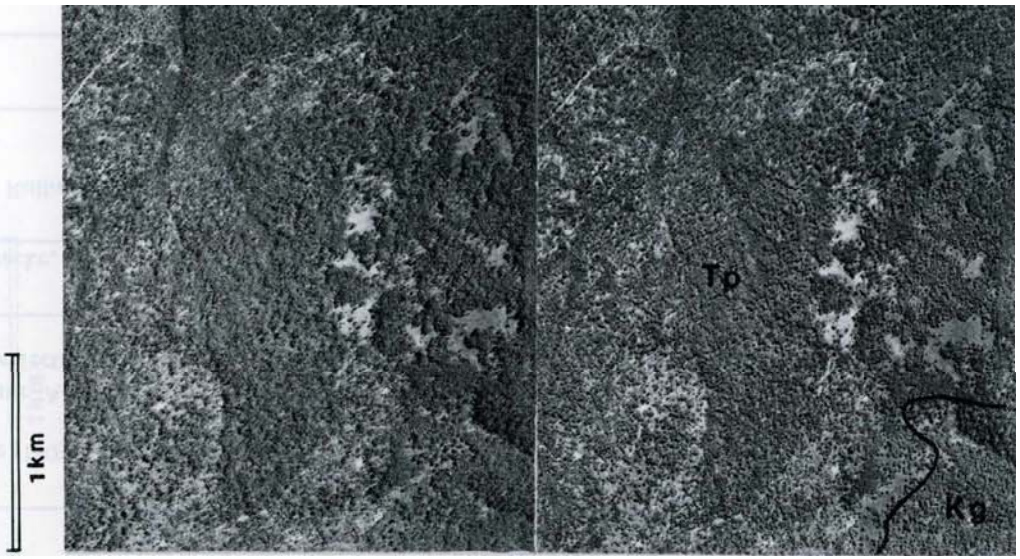
This land system occurs along the western edge of the study area and on the headwater divides of the Fifteen Mile, Middle and Boggy Creeks and the King River West Branch. The landscape is an undulating to low hilly plateau, bounded by the steep slopes of the Drum Top or King land systems. The rocks are Upper Devonian rhyolite and rhyodacite. Annual rainfall is high. Summers are warm and dry and winters are cold and wet.



The soils are mainly friable brown gradational soils, with occasional deeply weathered reddish brown gradational soils with rough ped fabric in drier areas.

Over most of the land system the native vegetation is open forest of *Eucalyptus radiata* and *E. rubida* with some *E. st-johnii* and *E. viminalis*, and occasional stands of *E. obliqua*, *E. camphora* occurs in areas of impeded drainage.

The better-quality forests have been logged for sawn timber. Some small areas have been cleared for pastures, but usually only where the basaltic Mahaakah land system adjoins. The soils are generally stable and permeable. The cold winters would restrict the growing season for agricultural production.



TOOMBULLUP LAND SYSTEM Area 43 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): lowest areas June-August, highest areas May-September Precipitation – months less than 50% frequency of effective rain: January-February			
GEOLOGY				
Age, lithology	Upper Devonian rhyolite and rhyodacite			
PHYSIOGRAPHY				
Landscape	Low hilly plateau			
Elevation range (m)	650-900			
Relative relief (m)	80			
LAND COMPONENT	1	2	3	4
Percentage of land system	40	20	5	35
PHYSIOGRAPHY				
Land form	Low hill	Low hill	Shallow valley	Plateau
Position on land form	Exposed, dry slope	Sheltered, moist slope	-	-
Slope range (%)	8-20	8-15	5-15	5-12
Slope shape	Convex	Linear-concave	Concave	Linear-irregular
NATIVE VEGETATION				
Structure	Open forest III	Open forest III	Open forest III	Open forest III
Dominant species	*E. radiata, E. rubida, E. dives*	*E. obliqua, E. radiata, E. viminalis*	*E. radiata, E. st-johnii, E. camphora*	*E. radiata, E. rubida, E. st-johnii*
SOIL				
Parent material	*In situ* weathered rock	*In situ* weathered rock	*In situ* weathered rock	*In situ* weathered rock
Description	Reddish brown gradational sols with rough ped fabric	Friable brown gradational soils	Weakly bleached yellowish brown gradational soils	Friable brown gradational soils
Surface texture	Sandy loam	Sandy loam	Sandy loam	Sandy loam
Permeability	High	High	Low	High
Depth (m)	1.5	2.0	2.0	2.0
LAND USE	Mostly uncleared; timber production from better-quality forests Cleared areas; grazing			
SOIL DETERIORATION HAZARD				
Critical land features, processes, forms	Cold winters would restrict agricultural production; compaction of intensive-use areas may lead to increased surface run-off and erosion			