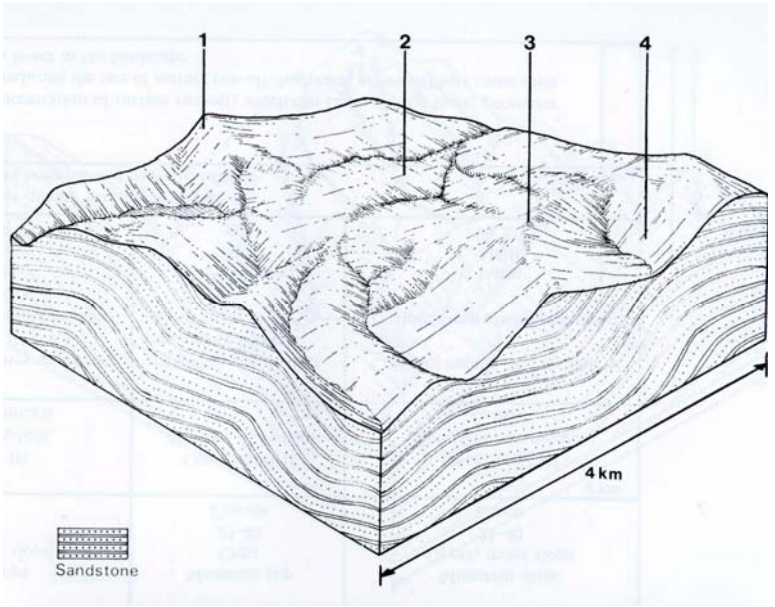
7.21 Stanley land system

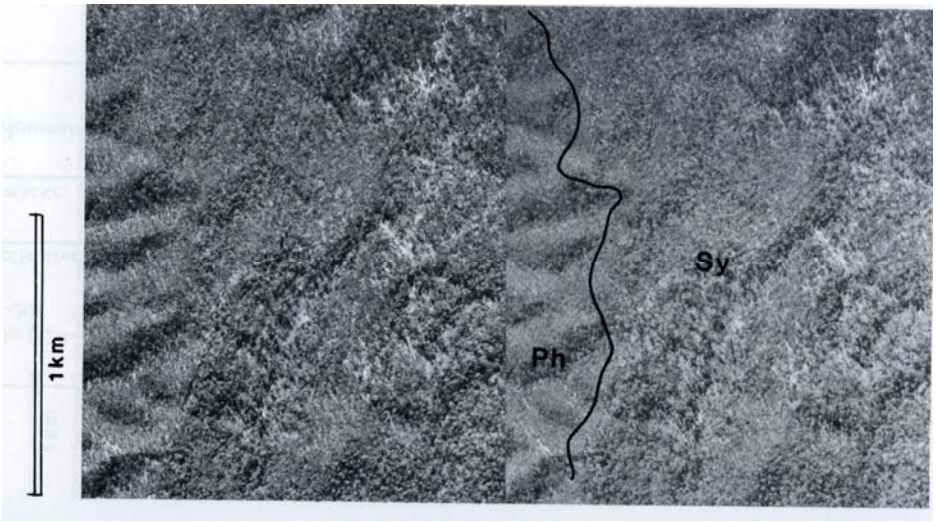
A southerly extension of the Stanley land system (Rowe 1972) from the Kiewa catchment indicates a small plateau on the central eastern watershed near Simmonds Gap. The landscape is a rolling to low hilly plateau on Ordovician sedimentary rocks. Annual rainfall is high. Mild dry summers contrast with cold wet winters; frosts occur from mid autumn to late spring in low areas, and occasional light falls of snow occur in some winters.

Reddish brown gradational soils with rough ped fabric predominate, but some areas of low relief have reddish brown gradational soils with smooth ped fabric. Friable brown gradational soils occur on the steeper slopes of the valleys.

Open forest of *Eucalyptus radiata*, *E. rubida* and *E. dives* is the characteristic vegetation. *E. st-johnii* and *E*. *viminalis* also occur in moister areas. A small area of open forest of *E*. *delegatensis* occurs in the Simmonds Gap area.

Compaction of the soils on access tracks leads to surface run-off and relatively minor erosion. Sheet erosion and rilling may also occur in areas of intensive cultivation. Generally, however, the soils are permeable and relatively stable.





STANLEY LAND SYSTEM Area 21 sq km

CLIMATE				
Rainfall, mean (mm)	Annual 1000-1250; lowest January (45), highest June (19)			
Temperature, mean (^{o}C)	Annual 13; lowest July (6.5), highest January (20)			
Seasonal growth limitations	Temperature – less than 10^{o}C (av): lowest rates June-August, highest areas June-September Precipitation – months less than 50% frequency of effective rain: January-February			
GEOLOGY				
Age, lithology	Ordovician greywacke, sandstone, siltstone, shale, mudstone			
PHYSIOGRAPHY				
Landscape	Rolling to hilly plateau			
Elevation range (m)	750-900			
Relative relief (m)	80			
LAND COMPONENT	1	2	3	4
Percentage of land system	15	40	10	35
PHYSIOGRAPHY				
Land form	Steep hill	Dissected plateau	Low hill	Shallow valley
Position on land form	-	-	-	-
Slope range (%)	15-25	5-10	10-15	8-15
Slope shape	Linear-convex	Linear	Convex	Concave
NATIVE VEGETATION				
Structure	Open forest II	Open forest III	Open forest III	Open forest III
Dominant species	*E. dives, E. rubida, E. macrorhyncha*	*E. radiata, E. rubida, E. dives, E. st-johnii*	*E. radiata, E. rubida, E. dives, E. st-johnii*	*E. radiata, E. viminalis, E. st-johnii*
SOIL				
Parent material	Colluvial mantle over weathered bedrock	Alluvial-colluvial mantle	Colluvial mantle over weathered bedrock	Colluvial mantle over bedrock
Description	Friable brown gradational soils	Reddish brown gradational soils with rough ped fabric	Reddish brown gradational soils with rough ped fabric	Weakly bleached reddish brown gradational soils
Surface texture	Gravelly loam	Loam	Loam	Loam
Permeability	High	High	High	High
Depth (m)	1.0	2.0	2.0	1.5
LAND USE	Uncleared timber; limited timber production	Mostly cleared; apple orchards, potato-cropping, grazing; plantations of *Pinus radiata*		
SOIL DETERIORATION HAZARD				
Critical land features, processes, forms	Compaction of intensive-use areas such as access tracks results in excessive surface run-off – track erosion:			
		Intensive cultivation results in loss of infiltration capacity, increased surface run-off; sheet erosion, frosts may damage horticultural crops		