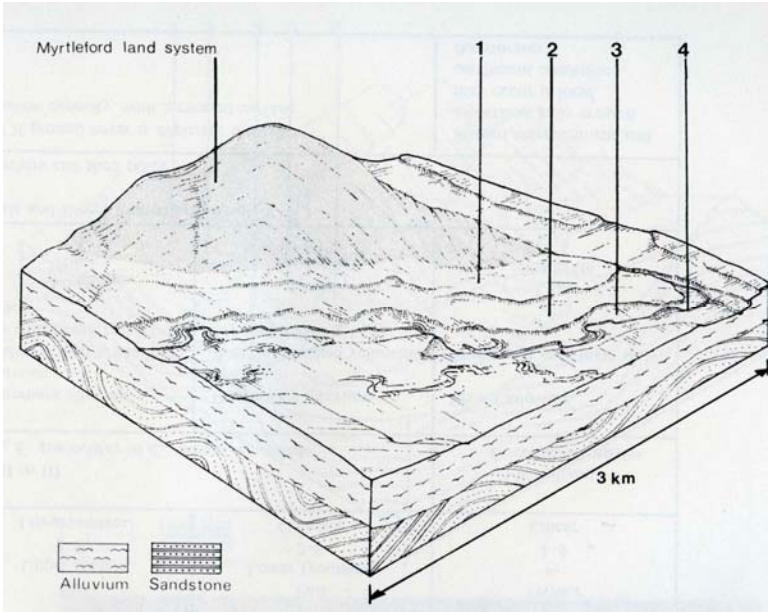
7.18 Ovens land system

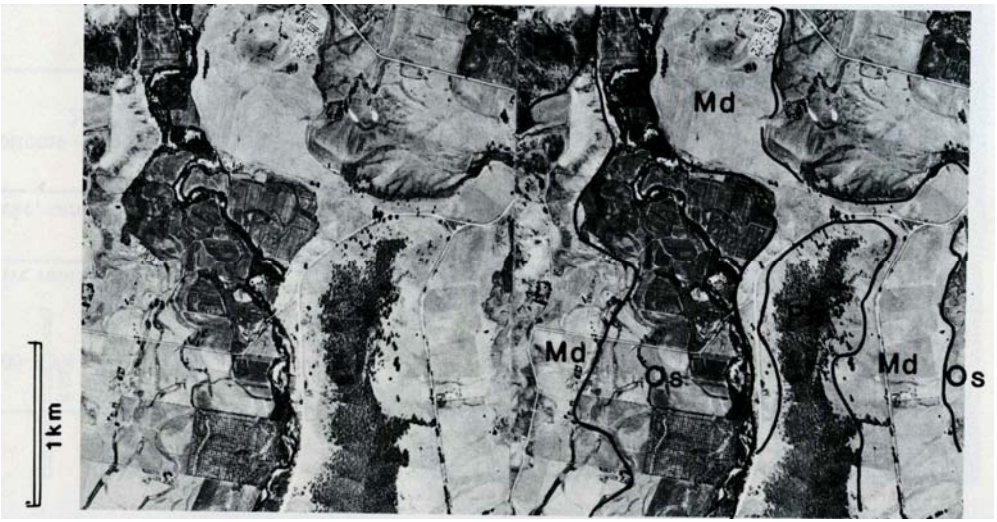
This land system occupies the central valley alluvium of the main streams. The predominant rocks of the respective catchments influence the texture and mineralogy of the alluvium, which is the parent material of the soils. The stream floodplain makes up most of the landscape, with abandoned meander channels common the larger streams. Several terraces, vertically separated by a meter or two, are also usually present, but none is extensive and they are often fragmentary. Annual rainfall ranges from moderate in the north to high in the south. Summers are hot in the north and warm in the south, and winters are generally cold, with frosts occurring from mid autumn to late spring.

Soils range from undifferentiated sand and loam soils at the lowest levels adjoining the stream channels, through brown and grey loam soils over most of the flood-plain, to yellowish brown and reddish brown gradational soils on the alluvium of the relatively higher terraces.

The vegetation was originally woodland of *Eucalyptus camaldulensis*, with occasional occurrences of *E. goniocalyx* and *E. melliodora* in the northern areas and *E. viminalis* in the cooler south. The west depressions of the floodplain usually have fenland of *Phragmites communis*.

Winter and spring floods may erode bare soil or deposit sediments, and severe frosts restrict the growing season.





OVENS LAND SYSTEM Area 217 sq km

CLIMATE				
Rainfall, mean (mm)	Annual 750-1250; lowest January (45-55), highest June (115-160)			
Temperature, mean (^{o}C)	Annual 14; lowest July (6-8), highest January (18-21)			
Seasonal growth limitations	Temperature – less than 10^{o}C (av): lowest areas May-August, highest areas May-September Precipitation – months less than 50% frequency of effective rain: January-February			
GEOLOGY				
Age, lithology	Recent alluvium – sand, silt, clay, gravel			
PHYSIOGRAPHY				
Landscape	Riverine flood plain and low terraces			
Elevation range (m)	200-300			
Relative relief (m)	8			
LAND COMPONENT	1	2	3	4
Percentage of land system	15	35	45	5
PHYSIOGRAPHY				
Land form	Terrace	Terrace	Flood plain	Stream trench
Position on land form	Upper	Lower	-	-
Slope range (%)	1-8	1-8	1-8	2-5
Slope shape	Irregular-linear	Irregular-linear	Irregular-linear	Concave
NATIVE VEGETATION				
Structure	Woodland			
Dominant species	*E. camaldulensis;* occasionally *E. bridgesiana* and *E. melliodora*			
SOIL				
Parent material	Alluvium	Alluvium	Alluvium	Alluvium
Description	Reddish brown gradational soils on alluvium	Yellowish brown gradational soils on alluvium	Brown and grey loam soils	Undifferentiated sand and loam soils
Surface texture	Sandy loam	Sandy loam	Loam	Sand
Permeability	High	Moderate	High	High
Depth (m)	1.5	1.5	1.5	1.0
LAND USE	Mostly cleared; grazing of beef and dairy cattle; intensive cultivation of tobacco, hops and maize			
SOIL DETERIORATION HAZARD				
Critical land features, processes, forms	Rare flooding; sheet erosion if surface run-off occurs when soils are cultivated	Occasional flooding; sheet erosion if surface run-off occurs when soils are cultivated	Regular annual flooding; sheet erosion if surface run-off occurs when soils are cultivated	Regular annual flooding; stream-bank erosion