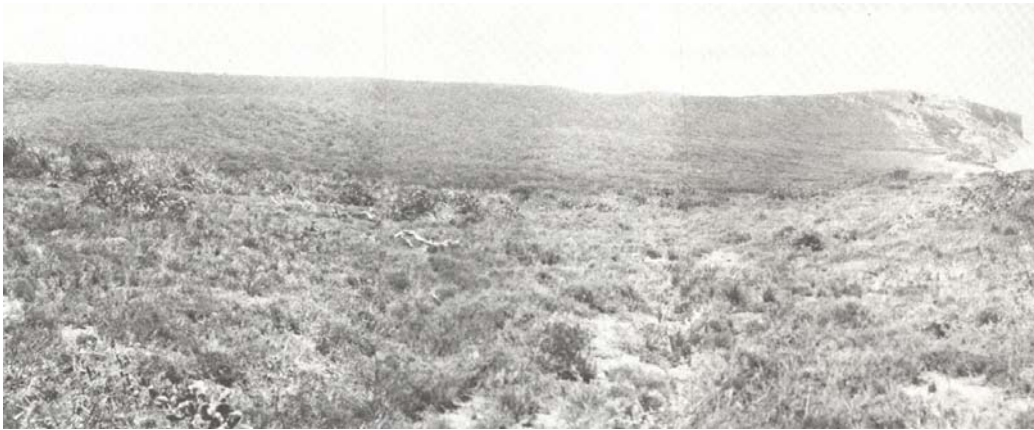


7.2 Anglesea Land System

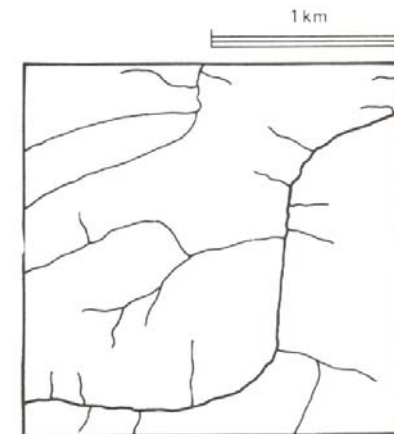
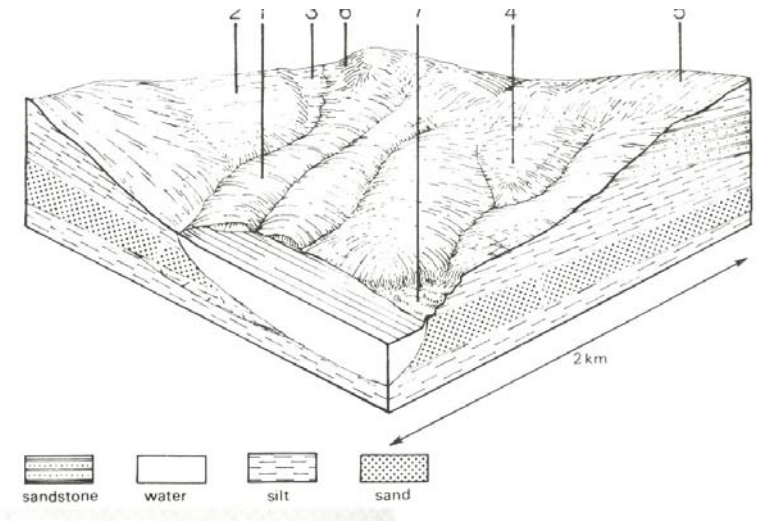
Stretching inland from the coast between Bells Beach and Moggs Creek lies a dissected plain on Tertiary sediments. Long straight slopes emanate from spurs and ridges. The coastal margins are retreating and often abut the sea in steep cliffs or massive landslips and earthflows.

The parent material is very variable, ranging from lateritized sediments on the ridges to relatively unweathered alluvium in the drainage lines. Thus the soils are particularly variable.

In general, plant nutrient levels are low and surface horizons are weakly structured. Plant communities are mainly open forests less than 15 m in height; the height decreases towards the coast under the influence of salt-bearing winds. The area is highly regarded for its diversity of flora. Some parts have been cleared for agriculture. The main hazards to land use are gully erosion and sheet erosion.



Exposed coastal sites carry salt-pruned open scrubs that are sensitive to disturbance, and revegetation of eroded areas is difficult.



ANGLESEA
Area: 74 km²

	Component and its proportion of land system						
	1 25%	2 5%	3 10%	4 30%	5 %25%	6 2%	7 3%
CLIMATE Rainfall, mm Temperature, 0°C Seasonal growth limitations	Annual: 600 –800, lowest January (35), highest August (80) Annual: 14, lowest July (9), highest February (17) Temperature: less than 10°C (av.) July Precipitation: less than potential evapotranspiration mid October – early April						
GEOLOGY Age, lithology	Highly variable Eocene sediment consisting mainly of unconsolidated clayey silt, sand						
TOPOGRAPHY Landscape Elevation, m Local relief, m Drainage pattern Drainage density, km/km ² Land form Land form element	Moderately dissected hills lying below and on the seaward side of the lateritic plateaux 0 - 195 50 Rectangular 1.6 Hill						
Slope (and range), % Slope shape	Exposed coastal slope 20 (5-45) Linear/irregular	Slope, crest 2 (5-15) Linear	Lower slop, drainage line 8 (1-15) Concave	Middle slop 15 (5-35) Convex	Upper slope, crest 10(1-20) Convex	Steep slop 45 (25-55) Linear	Landslip (5-90) Irregular
NATIVE VEGETATION Structure Dominant species	Open scrub <i>E. obliqua</i> , <i>Casuarina stricta</i> , <i>E. sideroxylon</i>	Woodland <i>E. viminalis</i> , <i>E. radiata</i> , <i>E. baxteri</i>	Open forest <i>E. sideroxylon</i> <i>E. obliqua</i>	Open forest <i>E. sideroxylon</i> <i>E. obliqua</i>	Open forest <i>E. obliqua</i> <i>E. sideroxylon</i> , <i>E. baxteri</i>	Open forest <i>E. obliqua</i> , <i>E. baxteri</i> , <i>E. sideroxylon</i>	Low woodland <i>E. sideroxylon</i> <i>E. obliqua</i> <i>Melaleuca lanceolata</i> , <i>Casuarina stricta</i>
SOIL Parent material Description Surface texture Permeability Depth, m	Calcareous sand, clay silt, sand and gravel Variable sodic duplex soils Sandy loam Moderate >2	Sand and gravel Grey sand soils, uniform texture Loamy sand Very high >2	Clay, silt and sand Yellow-brown sodic duplex soils, coarse structure Fine sandy loam Very low >2	Slay, silt and sand, sandstone Yellow-brown duplex soils, coarse structure Fine sandy loam Very low >2	Deeply weathered clay, silt and sand Mottled yellow and red duplex soils Sandy loam Moderate >2	Lateritic ironstone, sandstone Stony red gradational soils Sandy loam Very high 0.2	Clay, silt and sand; some aeolian sand Variable sodic duplex soils Sandy loam Moderate >2
LAND USE	Uncleared areas: Nature conservation; active and passive recreation; landscape conservation; gravel extraction Cleared areas: Beef cattle grazing on mainly unimproved pastures; residential; active recreation						
SOIL DETERIORATION HAZARD Critical land features, processes, forms	Native vegetation is sensitive to salt pruning and disturbance. Highly dispersible soils on steep slopes are prone to sheet erosion, gully erosion and tunnel erosion	Very low inherent fertility and high permeability lead to nutrient decline.	Sodic, highly dispersible subsoils are prone to gully and tunnel erosion.	Highly dispersible soils are prone to gully and tunnel erosion. Weakly structured surface soils over slowly permeable subsoils on steep slopes are prone to sheet erosion.	Low inherent fertility, phosphorus fixation and leaching of permeable A horizons lead to nutrient decline.	Stony shallow soils with low organic content, weak structure and low water-holding capacity on steep slopes are prone to sheet erosion.	Native vegetation is sensitive to salt pruning and disturbance. Marine under-cutting of highly dispersible soils maintains active landslips and earth flows.