

613111

THORNTON RIVER

A peneplain formed on principally siliceous Precambrian strata occurs near the west coast. Its main development is a strip of country approximately fifteen kilometres wide, extending from south of Marrawah to the Interview River, with some occurrence further north. Two small areas also occur on the peninsula forming the western side of Macquarie Harbour. Thornton River land system is bound in the west by a more or less well defined scarp at or near the coast and inland by the steeper topography of the Norfolk Range and by the more densely timbered country to the north and north-east. The peneplain surface has been dissected by gorge-like drainage lines cut by the westerly flowing streams. Parts of the area have been described by Hubble (1951), Nicolls (1955) and Macphail *et al* (1975).

The soils are mainly organic, consisting of a gravelly, sandy peat with siliceous rock fragments

becoming more prevalent with depth. Scattered through the area, especially in the north, are patches of higher ground with brown duplex soils developed on mudstone.

The open heath community on the plain contrasts with the closed scrub in the drainage lines and the open forest found on the better quality soils. The heath association includes button grass, stunted *Leptospermum nitidum*, *Xyris operculata*, *Leptocarpus tenax* and *Sprengelia incarnata*. Prominent along the drainage lines are Smithton peppermint, manuka, *Melaleuca squarrosa*, with *Calorophus lateriflorus* and scrambling coral fern. The duplex soils support an association of stringybark with an understorey of manuka, Australian blackthorn, *Casuarina monilifera*, honeysuckle and *Lepidosperma concavum*.

The area mainly serves as a 2one of nature conservation and for recreation.

The main hazard lies in the drainage lines, where the erodible sandy soils on the steep slopes are very susceptible to rilling and gullying.



Component 1

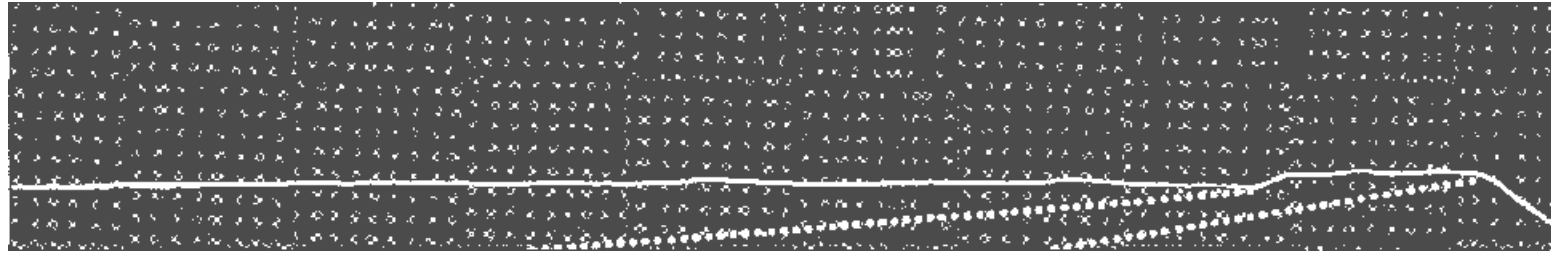


Component 2.

LAND SYSTEM

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COMPONENT	1	2	3
PROPORTION %	80	15	5
CLIMATE	Average Annual Rainfall 1 250-1 500 mm		
GEOLOGY	Precambrian sandstone mudstone sequences		
TOPOGRAPHY	Gently undulating plain		
Land form	Gently undulating plain		
Position	Plain	Slight rises	Drainage lines
Average Sideslope °	1	2	24
NATIVE VEGETATION			
Structure	Open heath	Open forest	Closed scrub
Association	Button grass, trigger plant, <i>Leptospermum nitidum</i> , <i>Xyris operculata</i> , <i>Leptocarpus tenax</i> , <i>Sprengelia incarnata</i>	Stringybark, manuka, Australian blackthorn, <i>Casuarina monilifera</i> honeysuckle <i>Lepido sperma concavum</i>	Smithton peppermint, manuka, <i>Melaleuca squarrosa</i> , <i>Calorophus lateriflorus</i> , scrambling coral fern
SOIL	Black sandy organic soil, becoming very gravelly	Stony, strong brown (7.5 YR 5/8) duplex sod	Black sandy organic soil
Surface Texture	Peat	Loam	Sandy peat
Permeability	High	Moderate	High
Average Depth m	0.6	1.6	0.3
PRESENT LAND USE	Nature conservation, recreation		
HAZARDS	Low sheet erosion		High rill, gully erosion