

783131

MACQUARIE HARBOUR

This land system occupies areas on the eastern side of Macquarie Harbour and round its northern end, with one other small occurrence in the Badger River further north. It consists of low plateaux with gentle scarp slopes. The plateaux are no doubt the terraces described by Dimmock (1952). He has postulated that the present landscape was built up by Pleistocene outwash material deposited by melting glaciers. These deposits, which consisted of unsorted rounded boulders, gravel, sand and clay were redistributed by subsequent erosion to give the country its present general form. In recent times the area was inundated by sand, which finally became stabilised by vegetation.

The soils are sandy, but on the plateaux restricted drainage has caused the formation of a black B horizon. A cemented layer in the upper solum also checks drainage of soils in the scarp situation. A typical profile on the scarp comprises a surface layer of sandy peat about 10 cm thick, then a 20 cm layer of loamy sand before the cemented zone consisting of 10-15 cm of siliceous stony and gravelly material. Below this is a freely draining pale coloured sand with yellow staining. In some places the cemented layer is very thick with only a thin surface layer of peaty sand.

A sedgeland dominated by button grass occurs on the plateaux, while on the scarps there is a heath where manuka and *Sprengelia incarnata* are the principal species.

Nature conservation is an important land use but due to its proximity to Strahan the system must be heavily exploited for recreational purposes. The Strahan airstrip has been constructed on this land

system and the thick gravelly deposits have been quarried.

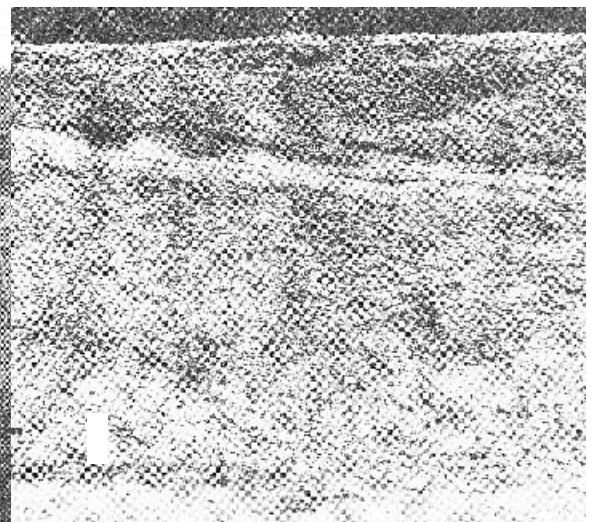
Wind erosion represents a moderate hazard on the plateaux and severe soil erosion is likely on the scarps.



Typical profile in the scarp situation



The flats belong to Strahan land system with Macquarie Harbour land system in the background

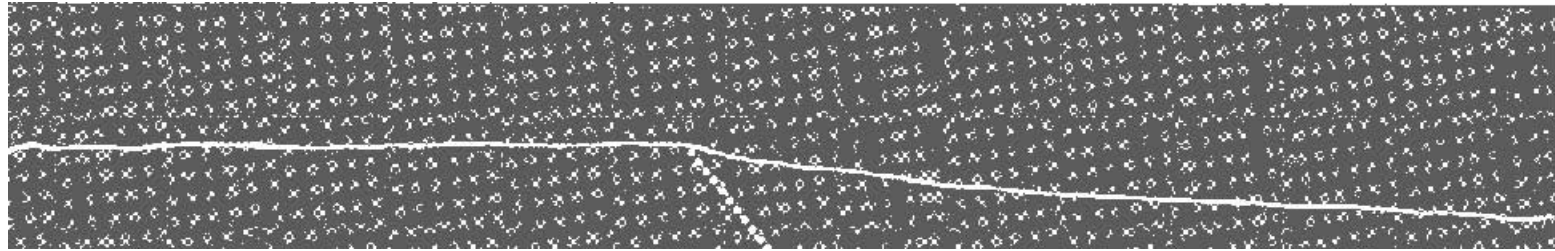


In some places the layer of cemented gravel is very thick

LAND SYSTEM

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COMPONENT	1	2
PROPORTION %	45	55
CLIMATE	Average Annual Rainfall 1 500-2 000 mm	
GEOLOGY	Tertiary gravelly non-marine sequences	
TOPOGRAPHY Land form	Low plateaux and gentle slopes	
Position	Plateaux	Gentle scarp and footslopes
Average Sideslope °	1	4
NATIVE VEGETATION Structure	Closed sedgeland	Open heath
Association	Button grass, <i>Leptocarpus tenax</i> , <i>Melaleuca squarrosa</i> , <i>Sprengelia incarnata</i>	Manuka, <i>Sprengelia incarnata</i> , button grass, cutting grass, <i>Xyris operculata</i>
SOIL	Grey (10 YR 6/1) sand soil, uniform texture, black B horizon	Light brownish grey (10 YR 6/2) sand soil, yellow staining, cemented gravelly layer near the surface
Surface Texture	Sandy peat	
Permeability	High	
Average Depth m	1.2	>2.0
PRESENT LAND USE	Nature conservation, recreation, airport, gravel quarrying	
HAZARDS	Moderate wind erosion	High sheet, rill, gully erosion