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NEASEY PLAINS

Undulating plains and flats with scattered low hills have developed on Precambrian slates and quartzite and occupy large tracts of remote country south of the Arthur River. These areas are easily distinguished by the characteristic heath and sedge-land vegetation from the surrounding forested terrain (Milkshake Hills land system).

A noticeable feature of the soils is the peaty nature of the surface layers and an organic profile has developed on the hills. Another common feature is the prevalence of quartzitic gravel and rock fragments in many of the profiles. Soils are fairly shallow on the hills and slopes with an abrupt change to quite deep profiles on the flats. The dark and dull coloured soils found over most of the system contrast with scattered patches of better

drained yellow soils. The plant communities growing thereon are equally divergent.

On the dark and dull coloured soils is a dense heath and sedge vegetation, in which button grass, *Calorophus lateriflorus* and *Sprengelia incarnata* are the main associates. However, stunted forms of *Casuarina monilifera* and Smithton peppermint plus manuka and *Melaleuca squarrosa* are also prominent. The yellow soils support a tall forest of Smithton peppermint with a dense tall shrub layer, characterised by manuka, *Acacia mucronata* and *Bauera* sp.

Nature conservation is the main land use but the Savage River Mines have constructed a pipeline and access road across it.

The principal erosion hazard is to the shallow gravelly soils found on the hills, although waterlogging and poor drainage would also be a problem on the flats.



Peaty material and a prevalence of quartzitic gravel and rock fragments characterise many soil profiles

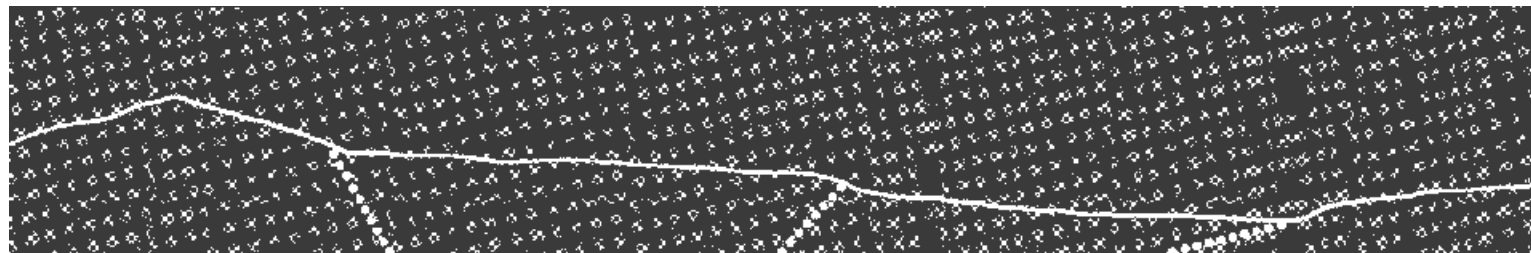
Neasey Plains land system is easily distinguished from the surrounding forested terrain



LAND SYSTEM

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Neasey Plains



COMPONENT	1	2	3	4
PROPORTION %	20	35	30	15
CLIMATE	Average Annual Rainfall 1 500-2 000 mm			
GEOLOGY	Precambrian slates, quartzite			
TOPOGRAPHY				
Land form	Mainly undulating plains			
Position	Crests, steeper upper slopes	Lower slopes	Footslopes, swales, flats	Forested areas
Average Sideslope °	10	5	1	4
NATIVE VEGETATION				
Structure	Closed heath and sedgeland			Tall open forest
Association	Button grass, <i>Calorophus lateriflorus</i> , <i>Casuarina monilifera</i> , manuka, <i>Melaleuca squarrosa</i> , <i>Sprengelia incarnata</i> , Smithton peppermint			Smithton peppermint, manuka, <i>Acacia mucronata</i> , cutting grass, <i>Bauera</i> sp
SOIL	Gravelly, black organic clay loam soil	Dark grey (10 YR 4/1) gradational soil	Gravelly, grey (10 YR 5/1) gradational soil	Gravelly, yellow (10 YR 7/8) gradational soil
Surface Texture	Gravelly peat	Loamy peat		Peaty loam
Permeability	High	Moderate		
Average Depth m	0.3	0.4	1.9	0.6
PRESENT LAND USE	Nature conservation, Savage River Mines pipeline			
HAZARDS	High gully erosion	Low sheet erosion		Moderate waterlogging