735141 VANISHING FALLS

The Vanishing Falls Land System is situated in the south east of the study area. It stretches from the island Ile du Golfe in the south, to the slopes of Precipitous Bluff and includes two small areas around Vanishing Falls and Judds Cavern. Solution cavities, caves, sinkholes and subsurface drainage characterise the Ordovician limestone which dominates the relatively steep slopes and flats in the region. Small areas of Ordovician limestone occur in the adjacent Surprise Bay Land System. Due to access problems information for this land system was obtained from aerial photo examination and extrapolation from similar country nearby. Some information was obtained from the New River—South Coast Catchment Report produced by the National Parks and Wildlife Service (1981) for the South West Tasmania Resource Survey.

This land system was probably affected by periglacial slope processes during the Pleistocene with dolerite coarse fragments likely in some soil profiles. These would have been derived from the Jurassic dolerite capping of Precipitous Bluff and Pindars Peak to the east. A depression in Ordovician limestone at the southern end of the South Picton Range just below a glacial lake (the lake occurs on dolerite in the South, East and Midlands Land System Survey study area) appears to have been scoured out by glacial action as it has a well developed moraine. It has subsequently been drained by what appears to be subsurface drainage.

Soils in this land system are likely to be dominated by peat horizons over gravelly soils on flats, or peat over brown loams on slopes. Both are likely to contain dolerite coarse fragments. Profiles along stream banks may lack organic horizons if active deposition of alluvial material is occurring. On poorly drained flats sedgeland/heath is widespread with some scrub and patches of forest. Stream banks often have forested margins with rainforest (closed forest) grading to mixed forest, and species such as Eucalyptus nitida, Leptospermum spp., Melaleuca spp., Acacia verticillata and Monotoca glauca common. These species probably dominate most of the scrub which occurs on the flats and the vegetation around streams and the lagoon shore.

This land system is included in the South West National Park.

LAND SYSTEM VANISHING FALLS

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Area(ha): 2042			• • <u>-</u>	
ALTITUDINAL RANGE(m)	0-300	APPROXIMATE ANNUAL RAINFALL (mm) 1500-2000		
SITE NO. /ALTITUDE m)/ASPECT		No site data		
TOPOGRAPHY		Slopes and undulating flats with the possibly of karst features		
Position	Well drained stream and lagoon banks	Poorly drained flats	Slopes	
Typical Slope()	0-5	0-3	10-15	
Proportion(%)	10	20	70	
GEOLOGY		Ordovician limestone		
NATIVE VEGETATION Structure	Scrub to closed-forest	Open to closed-heath and scrub	Open to closed-forest and scrub	
Floristic Association (See Appendix 1 for common names)	Nothofagus cunninghamii Eucalyptus nitida Atherosperma moschatum Phyllocladus aspleniifolius Leptospermum spp. Melaleuca spp. Bauera rubioides Monotoca glauca Acacia verticillata Anopterus qlandulosus	Gymnoschoenus sphaerocephalus Sprengelia incarnata Leptospermum nitidum Restio spp. Baeckea leptocaulis Lepyrodia tasmanica Leptocarpus tenax Bauera rubioides Xyris sp. Banksia marqinata Boronia sp.	Nothofaqus cunninqhamii Atherosperma moschatum Eucalyptus nitida <u>E. obliqua</u> Phyllocladus aspleniifolius Eucryphia lucida Anopterus qlandulosus Dicksonia antarctica Aristotelia peduncularis Coprosma quadrifida Gahnia qrandis Leptospermum spp. Melaleuca spp.	
SOIL Surface(A or P horizon)Colour (moist) and texture	Reddish brown fibrous peat	Black fibrous peat over a black muck peat	Reddish brown fibrous peat	
Subsoil (or B horizon) colour (moist) and texture	Brown or grey sand gravels	Grey sandy gravels or yellowish brown gravelly soils with dolerite coarse fragments	Brown clay loam to brown loam with dolerite coarse fragments	
Primary Profile form				
Depth surface horizon(m)				
Typical total depth(m)				
Permeability				
LAND USE		Nature conservation/recreation		
HAZARD				