

998221

LODDON

This land system is found scattered about the north of the study area. It consists of poorly drained undulating plains with alluvial flats around some rivers. Small, well drained knolls, scattered across the plains, are typical on many of the peat bogs to the south (see Melaleuca and Arthur Plains Land Systems). Precambrian phyllites and schists usually underlie organic soils (of possible Pleistocene or Tertiary age) but at the south eastern end of the Loddon Valley Ordovician sediments occur.

Black peats cover large areas of the land system often overlying silty mineral soils. Some grey mineral horizons have flecks of mica suggesting development from Precambrian schists. As is often the case in slightly better drained positions in the South West, reddish brown organic soils form surface horizons over relatively deep mineral soil on the small knolls. Peat overlies silty alluvial

deposits around rivers where high water-tables have led to mottling of deeper horizons.

Sedgeland/heath, often dominated by *Gymnoschoenus sphaerocephalus*, covers the deeper organic deposits on poorly drained flats. *Sprengelia incarnata*, *Melaleuca squamea* and *Leptospermum nitidum* are common, as are the sedges *Restio monocephalus*, *Lepidosperma filiforme* and *Lepyrodia tasmanica*. Species such as *Leptospermum glaucescens*, *Pteridium esculentum* and *Aotus ericoides*, which often indicate moderate to good drainage, occur on knolls with emergent *Eucalyptus nitida*, *Banksia marginata* and *Monotoca glauca* scrub. Forest and scrub dominated by *Eucalyptus nitida* grows on the alluvial deposits with rainforest occurring in places.

Nature conservation and recreation are the main land uses. Minor track erosion along walking tracks has resulted in the loss of some peat. This surface is sometimes protected (armoured) by a rocky layer. Track bifurcation has led to the development of numerous muddy wallows. Another problem is regular firing which can lead to peat loss and sheet erosion.

LAND SYSTEM
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Area (ha): 19862



ALTITUDINAL RANGE(m)	APPROXIMATE ANNUAL RAINFALL(mm) >2500		
SITE NO. /ALTITUDE m)/ASPECT	116/380/-	(118/380/-) (119/400/E)	117/380/-
TOPOGRAPHY		Undulating plains	
Position	Alluvial flats	Poorly drained flats	Small knolls
Typical Slope()	0	0-5	0-3
Proportion (%)	15	80	5
GEOLOGY	Peat overlying Ordovician sediments and Precambrian phyllites and shists		
NATIVE VEGETATION Structure	Open forest/scrub	Open to closed sedgeland/heath	Closed heath/scrub
Floristic	<i>Eucalyptus nitida</i>	<i>Gymnoschoenus sphaerocephalus</i>	<i>Eucalyptus nitida</i>
Association (See Appendix 1 for common names)	<i>Banksia marginata</i>	<i>Sprengelia incarnata</i>	<i>Banksia marginata</i>
	<i>Leptospermum lanigerum</i>	<i>Melaleuca squamea</i>	<i>Monotoca glauca</i>
	<i>Acacia dealbata</i>	<i>Leptospermum nitidum</i>	<i>Melaleuca squamea</i>
	<i>Orites diversifolia</i>	<i>Restio monocephalus</i>	<i>Bauera rubioides</i>
	<i>Anopterus glandulosus</i>	<i>Bauera rubioides</i>	<i>Pteridium esculentum</i>
	<i>Telopea truncata</i>	<i>Lepidosperma filiforme</i>	<i>Aotus ericoides</i>
	<i>Gahnia grandis</i>	<i>Lepyrodia tasmanica</i>	<i>Leptospermum glaucescens</i>
	<i>Pittosporum bicolor</i>	<i>Xyris</i> sp.	<i>L. scoparium</i>
	<i>Pomaderris apetala</i>	<i>Actinotus bellidioides</i>	<i>Gahnia grandis</i>
	<i>Callistemon viridiflorus</i>	<i>Styloidium grammifolium</i>	<i>Cvathodes parvifolia</i>
	<i>Bauera rubioides</i>	<i>Patersonia</i> sp.	<i>Lepidosperma filiforme</i>
SOIL Surface(A or P horizon)Colour (moist) and texture	Dark reddish brown (5 YR 2.5/2) fibrous peat	Reddish black (10 R 2.5/1) to very dark grey (10 YR 3/1) fibrous peat over a black (10 YR 2/1) muck peat	Dark reddish brown (5 YR 2.5/2) fibrous peat over a black (2.5 Y 2/0) muck peat
Subsoil (or B horizon) colour (moist) and texture	Very dark greyish brown (10 YR 3/2) silty clay loam over a mottled fine sandy clay loam	Black (10 YR 2/1) silty clay over a gravelly very dark greyish brown (10 YR 3/2) silty clay loam	Thin sandy, gravelly band separates peat from a dark greyish brown (10 YR 4/2) clay loam
Primary Profile form	Uniform	Or game/Complex	Organic
Depth surface horizon(m)	0.75	0.10-0.20	0.30
Typical total depth(m)	>0.50	0.35->0.70	>0.50
Permeability	Moderate	High	High
LAND USE		Nature conservation, recreation	
HAZARD		Moderate track erosion	