

LAND SYSTEM
Cygnet Hills

464142

Area (ha):
39102

COMPONENT	A	B	C	D	E
PROPORTION (%)	20	20	20	20	20
RAINFALL (mm)	Approximate Annual Rainfall: 750-1000				
GEOLOGY	Permian Mudstone, Siltstone Predominantly				
TOPOGRAPHY	Hills				
Position	Crests/Upper Slopes	Crests/Upper Slopes	Lower Slopes	Lower Slopes/Flats	Drainage Flats
Typical Slope (°)	15-20	15-20	10-20	5-20	2
NATIVE VEGETATION	Open Forest				
Structure	Open Forest				
Floristic Association (See Appendix 1 for common names)	<u>Eucalyptus obliqua</u> <u>Eucalyptus globulus</u> <u>Eucalyptus viminalis</u> <u>Exocarpos cupressiformis</u> <u>Exocarpos strictus</u> <u>Daviesia ulicifolia</u> <u>Leptospermum scoparium</u> <u>Olearia stellulata</u> <u>Dianella tasmanica</u> <u>Bursaria spinosa</u> <u>Danthonia caespitosa</u> <u>Dichelachne rara</u>	<u>Eucalyptus obliqua</u> <u>Daviesia ulicifolia</u> <u>Lomandra longifolia</u> <u>Pultenaea juniperina</u> <u>Epacris impressa</u> <u>Astroloma humifusum</u> <u>Microlaena stipoides</u> <u>Haloragis sp.</u> <u>Exocarpos cupressiformis</u> <u>Acacia mucronata</u> <u>Acacia botrycephala</u>	<u>Eucalyptus obliqua</u> <u>Acacia botrycephala</u> <u>Pultenaea juniperina</u> <u>Epacris impressa</u> <u>Exocarpos cupressiformis</u> <u>Pultenaea daphnoides</u> <u>Billardiera longiflora</u> <u>Deyeuxia sp.</u> <u>Pteridium esculentum</u> <u>Acacia dealbata</u> <u>Acacia verniciflua</u>	<u>Eucalyptus obliqua</u> <u>Eucalyptus viminalis</u> <u>Eucalyptus globulus</u> <u>Lomandra longifolia</u> <u>Pteridium esculentum</u> <u>Goodenia ovata</u> <u>Melaleuca squarrosa</u> <u>Gahnia grandis</u> <u>Cassinia aculeata</u> <u>Indigofera australis</u>	<u>Eucalyptus ovata</u> <u>Melaleuca squarrosa</u> <u>Leptospermum lanigerum</u> <u>Gahnia grandis</u> <u>Acacia verticillata</u> <u>Leptospermum scoparium</u> <u>Acacia melanoxylon</u>
SOIL	Surface(A) Texture				
Surface(A) Texture	Fine Sandy Loam	Fine Sandy Loam	Fine Sandy Loam	Fine Sandy Loam/Clay Loam	Fine Sandy Clay Loam/ Light Clay
B Horizon (subsoil) Colour (moist) Texture and primary profile form	Shallow, stony fine sandy loam - greyish brown (10 YR 5/2) on bedrock. Uniform.	Shallow (stony) light clay - dark grey (10 YR 4/1) on bedrock. Duplex.	Deep (stony) light clay-very pale brown (10 YR 8/4) to light grey (10 YR 7/1). Duplex.	Deep medium clay - brown/dark brown (10 YR 4/3). Duplex.	Deep medium clay - grey (10 YR 5/1) with light olive brown (2.5 Y 5/4) mottle. Gradational.
Permeability	High	Moderate/High	Moderate	Low/Moderate	Low
Typical depth(m)	0.40	0.40	>1.40	1.30	>1.40
LAND USE	Grazing, Cropping				
HAZARDS	Moderate/High Sheet, Rill, Gully, Tunnel Erosion				Flooding, Waterlogging

CYGNET HILLS

This extensive land system includes mudstone hills and associated flats in the Cygnet area. Localised areas of Cretaceous alkaline intrusions are sometimes present. It has been extrapolated to include similar country in various outlying areas such as along the D'entrecasteaux Channel at Birches Bay, Woodbridge, Margate, Oyster Cove; at Castle Forbes Bay, Waterloo, and Glen Huon along the Huon River, and at Lonnavale, Lucaston and Mountain River.

Crests and upper slopes commonly contain a shallow (0.40 m), stony, uniform, greyish brown, fine sandy loam developed on bedrock. This supports an open forest dominated by *Eucalyptus obliqua*, *Eucalyptus globulus* and *Eucalyptus viminalis* with a heathy understorey.

viminalis with a heathy understorey. Crests and upper slopes also have a shallow (0.40m), of soil with a fine sandy loam surface over a dark grey, light clay. This supports an open forest dominated by *Eucalyptus obliqua* with a heathy understorey.

Lower slopes contain a deep (>1.40 m), sometimes stony, duplex soil with a fine sandy loam surface over a very pale brown to light grey clay. This supports an open forest dominated by *Eucalyptus obliqua* with a heathy understorey.

Flats and lower slopes have a deep (1.30 m), duplex soil with a fine sandy loam to clay loam surface over a brown to dark brown clay. This supports an open forest dominated by *Eucalyptus obliqua*, *Eucalyptus viminalis* and *Eucalyptus globulus* with a heathy understorey.

Drainage flats contain a deep (>1.40 m), gradational soil with a fine sandy clay loam to light clay surface over a grey clay with a light olive brown mottle. This supports an open forest dominated by *Eucalyptus ovata* with a scrub understorey.

Grazing and cropping are the major forms of land use although apple orchards are commonly found on the lower slopes and flats. The land system is particularly prone to erosion problems. Sheet and rill erosion frequently occur on crests and slopes whilst gully and tunnel erosion often occur on lower slopes and flats. Flooding and waterlogging hazards are associated with the drainage flats.

Localised outcrops of syenite are found in the Cygnet area. The geology and groundwater resources of the Cygnet district have been described by Leaman (1967) and Leaman and Nagvi (1968). The land system is closely related to the Collinsvale Hills (464243) and the Russell Falls (464141) Land Systems.