

LAND SYSTEM  
South Arm

268133

Area (ha):  
1100

COMPONENT	A	B	C	D	E
PROPORTION (%)	20	20	30	20	10
RAINFALL (mm)	Approximate Annual Rainfall: 500-625				
GEOLOGY	Permian Mudstone/Siltstone/Sandstone				
TOPOGRAPHY	Low Hills and Associated Flats				
Position	Crests/Upper Slopes	Lower Slopes/Flats	Sandy Lower Slopes/Flats	Sandy Flats	Clay Drainage Flats
Typical Slope(°)	10	6	3	0	0
NATIVE VEGETATION	Woodland				
Structure					
Floristic Association (See Appendix 1 for common names)	<u>Eucalyptus viminalis</u> <u>Pteridium esculentum</u> <u>Lomandra longifolia</u> <u>Casuarina stricta</u> <u>Dianella revoluta</u> <u>Astroloma humifusum</u>			<u>Eucalyptus ovata</u> <u>Melaleuca squarrosa</u> <u>Melaleuca gibbosa</u> <u>Lomandra longifolia</u> <u>Leptospermum scoparium</u> <u>Leptocarpus tenax</u> <u>Epacris lanuginosa</u> <u>Empodisma minus</u> <u>Sprengelia incarnata</u>	
SOIL					
Surface (A) Texture	Clay Loam/Sandy Loam	Loamy Sand/Sandy Clay Loam	Loamy Sand	Loamy Sand	Clay
B Horizon (subsoil) Colour (moist) Texture and primary profile form	Shallow stony heavy clay-Dark yellowish brown (10 YR 4/4). Duplex.	Deep clay - Light olive brown (2.5 Y 5/4) to dark yellowish brown (10 YR 4/4) Duplex.	Deep sand - Various colours e.g. light grey (5 Y 7/1) to dark brown (10 YR 4/3) to yellowish brown (10 YR 5/4). Uniform.	Deep sandy clay - strong brown (7.5 YR 5/8). Duplex.	Deep clay - Grey (10 YR 5/1) to yellowish brown (10 YR 5/8). Uniform.
Permeability	High/Moderate	Moderate	High	Moderate	Low
Typical depth(m)	0.50	0.80	>1.40	>1.40	>1.40
LAND USE	Grazing, Cropping, Sandmining				
HAZARDS	Moderate/High Sheet, Rill, Gully, Tunnel, Wind Erosion				Flooding, Waterlogging

SOUTH ARM

This land system includes low hills and associated flats formed on interbedded sequences of mudstone and sandstone in the South Arm region.

Stony crests and upper slopes commonly contain a shallow (0.50 m) duplex soil consisting of a sandy loam to clay loam surface over a dark yellowish brown heavy clay.

Lower slopes and flats usually have a deep duplex (0.80 m) soil with a loamy sand or sandy clay loam surface over a light olive brown to dark yellowish brown clay. Sandy lower slopes and flats commonly contain a deep (>1.40 m) uniform light grey, dark brown or yellowish brown sand.

Sandy flats may also have a deep (>1.40 m) duplex soil consisting of a loamy sand surface over a strong brown sandy clay. All these soils support a woodland dominated by *Eucalyptus viminalis* over an understorey of *Pteridium esculentum*, *Lomandra longifolia*, *Casuarina stricta*, *Dianella revoluta* and *Astrolomahumifusum*.

Clay drainage flats typically contain a deep (>1.40 m) uniform grey to yellowish brown clay that supports a *Eucalyptus ovata* woodland. The understorey includes *Melaleuca squarrosa*, *Melaleuca gibbosa*, *Lomandra longifolia*, *Leptospermum scoparium*, *Leptocarpus tenax*, *Epacris lanuginosa*, *Empodisma minus* and *Sprengelia incarnata*.

This country is particularly prone to erosion. Sheet, rill, gully, tunnel and wind erosion typically occur on the slopes and flats whilst flooding and waterlogging occur on the drainage flats with clayey soils. Grazing and cropping are the major land uses. Sand mining occurs on the deep sands.



*Mudstone crests (foreground) looking south towards Fort Direction and the township of South Arm.*