

LAND SYSTEM
Moogara Hills

472245

Area (ha):
6039

COMPONENT	A	B	C	D	E
PROPORTION (%)	30	20	20	20	10
RAINFALL (mm)	Approximate Annual Rainfall: 750-1000				
GEOLOGY	Jurassic Dolerite				
TOPOGRAPHY	Steep Slopes				
Position	Protected Upper Slopes	Protected Mid Slopes	Exposed Mid Slopes	Exposed Lower Slopes	Drainage Flats
Typical Slope (°)	10	10	20	B	5
NATIVE VEGETATION					
Structure	Open Forest	Open Forest	Open Forest	Low Woodland	Open Forest
Floristic Association (See Appendix 1 for common names)	<u>Eucalyptus delegatensis</u> <u>Eucalyptus regnans</u> <u>Olearia viscosa</u> <u>Billardiera longiflora</u> <u>Cassinia aculeata</u> <u>Acacia dealbata</u> <u>Pteridium esculentum</u> <u>Coprosma quadrifida</u>	<u>Eucalyptus obliqua</u> <u>Eucalyptus regnans</u> <u>Eucalyptus globulus</u> <u>Acacia verticillata</u> <u>Acacia dealbata</u> <u>Coprosma quadrifida</u> <u>Pteridium esculentum</u>	<u>Eucalyptus obliqua</u> <u>Eucalyptus globulus</u> <u>Eucalyptus rubida</u> <u>Gahnia grandis</u> <u>Juncus sp.</u> <u>Pultenaea juniperina</u> <u>Lomatia tinctoria</u> <u>Acacia verticillata</u> <u>Cassinia aculeata</u> <u>Callistemon pallidus</u>	<u>Eucalyptus pulchella</u> <u>Casuarina monnifera</u> <u>Leucopogon collinus</u> <u>Pimelea nivea</u> <u>Cyathodes sp.</u> <u>Hakea epiglottis</u> <u>Eriostemon verrucosus</u> <u>Lomatia tinctoria</u> <u>Acacia dealbata</u> <u>Spyridium ulicinum</u>	<u>Eucalyptus ovata</u> <u>Melaleuca squarrosa</u> <u>Gahnia grandis</u> <u>Leptospermum lanigerum</u>
SOIL					
Surface (A) Texture	(Stony) Loam	Stony Clay Loam	Stony Clay Loam	Clay Loam	Clay Loam/Light Clay
B Horizon (subsoil) Colour (moist) Texture and primary profile form	Deep friable (stony) clay loam - Dark reddish brown (2.5 YR 2.5/4) to strong brown (7.5 YR 4/6). Gradational.	Deep extremely stony medium clay - yellowish red (5 YR 4/6) to dark red (2.5 YR 3/6). Gradational.	Shallow stony heavy clay-dark greyish brown (10 YR 4/2) sometimes with yellowish red (5 YR 5/8) mottle. Duplex.	Stony, light olive brown heavy clay. Duplex.	Deep medium clay - grey (10 YR 5/1) to yellowish brown (10 YR 5/6) with light grey (10 YR 6/1) mottle. Gradational.
Permeability	Moderate	Moderate	Moderate/High	Moderate	Low
Typical depth(m)	>1.40	>1.40	0.40	0.60	>1.40
LAND USE	Forestry, Grazing, Cropping (Small Fruits)				
HAZARDS	Low Sheet Erosion			Flooding, Waterlogging	

MOOGARA HILLS

This land system consists of steep, dolerite slopes and associated flats in the vicinity of Uxbridge and Moogara. It also includes country west of Collinsvale and on the slopes of Mt Faulkner.

Upper slopes (>400 m A.S.L.) contain a deep (>1.40 m), gradational, often stony soil consisting of a loam surface over a dark reddish brown to strong brown, friable clay loam. This supports an open forest dominated by *Eucalyptus delegatensis* and *Eucalyptus regnans* with an understorey of *Olearia viscosa*, *Billardiera longifolia*, *Cassinia aculeata*, *Acacia dealbata*, *Pteridium esculentum* and *Coprosma quadrifida*.

Protected slopes have a deep (>1.40 m), extremely stony, gradational soil with a clay loam surface over a yellowish red to dark red, medium clay. This supports an open forest dominated by *Eucalyptus obliqua*, *Eucalyptus regnans* and *Eucalyptus globulus* with an understorey of *Acacia verticillata*, *Acacia dealbata*, *Coprosma quadrifida* and *Pteridium esculentum*. Also present are *Acacia melanoxylon*, *Eucalyptus viminalis*, *Banksia marginata*, *Bedfordia salicina*, *Tetratheca pilosa*, *Microsorium diversifolium* and *Notelaea ligustrina*. Slopes also contain a shallow (0.40 m), stony, duplex soil consisting of a clay loam surface over a dark greyish brown, heavy clay that may have a yellowish-red mottle. This supports an open forest to woodland dominated by *Eucalyptus obliqua*, *Eucalyptus globulus* and *Eucalyptus rubida* with an understorey that includes *Gahnia grandis*, *Pultenaea juniperina*, *Lomatia tinctoria*, *Acacia verticillata*, *Cassinia aculeata* and *Callistemon pallidus*,

Exposed slopes (<400 m A.S.L.) have a stony, duplex soil with a clay loam surface over a light olive brown, heavy clay. This supports a low woodland dominated by *Eucalyptus pulchella* with a heathy understorey that includes *Casuarina monilifera*, *Leucopogon collinus*, *Pimelea nivea*, *Cyathodes sp.*, *Hakea epiglottis*, *Eriostemon verrucosus*, *Lomatia tinctoria*, *Acacia dealbata* and *Spyridium ulicinum*.

Drainage flats contain a deep (>1.40 m), gradational soil consisting of a clay loam to light clay surface over a grey to yellowish brown, mottled, medium clay. This supports an open forest dominated by *Eucalyptus ovata* with an understorey that includes *Melaleuca squarrosa*, *Gahnia grandis* and *Leptospermum lanigerum*,

The land is mainly utilised for forestry and grazing although cropping of small fruits is also prevalent. *Pinus radiata* plantations are found near Moogara. The land is not particularly vulnerable to erosion although landslips can occur on the steeper slopes following disturbance. Flooding and waterlogging are potential hazards on the drainage flats.