

LAND SYSTEM
Mt Allen

4 7 2 2 5 3

Area (ha) :
5 3 2 0 8

COMPONENT

A

B

C

D

E

PROPORTION (%)

30

20

20

20

10

RAINFALL (mm)

Approximate Annual Rainfall: 750-1000

GEOLOGY

Jurassic Dolerite

TOPOGRAPHY

Mountains and Associated Marshes and Swamps

Position

Stony Crests / Outcrops

Exposed Upper Slopes/
Rocky Flats

Protected Slopes

Steep Exposed
Stony Slopes

Marshes / Swamps

Typical Slope (°)

15

0-10

10-20

10-20

0

NATIVE VEGETATION

Structure

(Low) Open Woodland

Woodland

(Tall) Open Forest

Woodland

Scrub/Heath

Floristic
Association
(See Appendix 1
for common
names)

Eucalyptus amygdalina
Acacia botrycephala
Pimelea nivea
Notelaea ligustrina
Veronica formosa
Correa lawrenciana

Eucalyptus viminalis
Eucalyptus amygdalina
Eucalyptus tenuiramis
(Eucalyptus sieberi)
Casuarina littoralis
Xanthorrhoea australis
Lomatia tinctoria
Hibbertia riparia
Lomandra longifolia
Pultenaea gunnii
Tetratea pilosa
Lepidosperma laterale
Banksia marginata

Eucalyptus obliqua
(Eucalyptus globulus)
Acacia dealbata
Olearia lirata
Pomaderris apetala
Moss
Coprosma quadrifida
Polystichum proliferum
Pteridium esculentum
Pittosporum bicolor

Eucalyptus amygdalina
Eucalyptus viminalis
Lomandra longifolia
Themeda australis
Lepidosperma laterale
Bursaria splanosa
Astroloma humifusum
Viola hederacea
Leptospermum scoparium
Casuarina monilifera
Pteridium esculentum

Leptospermum lanigerum
Callistemon vridiflorus
Hemarthria uncinata
Carex iynx
Gahnia grandis
Eucalyptus ovata
Eucalyptus rodwayi

SOIL

Surface(A) Texture

Loam

Clay Loam

Clay Loam

Clay Loam

Light Clay

B Horizon (subsoil)
Colour (moist)
Texture and
primary profile
form

Extremely shallow, stony
loam - dark brown
(10 YR 3/3) on bedrock.
Uniform.

Shallow, stony, light
clay - yellowish brown
(10 YR 5/6) to strong
brown (7.5YR 4/6).
Duplex.

Deep, stony, medium
clay - yellowish red
(5 YR 5/8) to yellowish
brown (10 YR 5/8).
Gradational.

Shallow, stony, heavy
clay - yellowish brown
(10 YR 5/4).
Duplex.

Deep, medium clay - black
(2.5 Y 2/0) to light grey
(10 YR 6/1) with strong
brown (7.5 YR 5/8) mottle.
Gradational.

Permeability

High

Moderate

Moderate

Moderate

Low

Typical depth(m)

0.30

0.60

>1.40

0.50

>1.40

LAND USE

Forestry, Grazing, Recreation

HAZARDS

Low Sheet, Rill Erosion

Waterlogging, Flooding

MT ALLEN

This land system is located in the north-east of the study area where it surrounds the Fingal Tier (472343) Land System. It includes dolerite hills and associated marshes and swamps in the vicinity of the Douglas and Apsley Rivers and extensive areas of stony, exposed slopes to the south of Fingal.

Exposed, stony crests and outcrops have a shallow (0.30 m), uniform, stony, dark brown loam developed on bedrock. This supports an open woodland to low, open woodland dominated by *Eucalyptus amygdallna* with an understorey of *Acacia botrycephala*, *Pimelea nivea*, *Notelaea ligustrina*, *Veronica formosa* and *Correa lawrenciana*.

Exposed upper slopes and rocky flats have a shallow (0.60 m), stony, yellowish brown to strong brown, duplex soil. This supports a woodland dominated by *Eucalyptus viminalis* and *Eucalyptus amygdalina* or occasionally by *Eucalyptus tenuiramis* and *Eucalyptus sieberi*, with an understorey that includes *Casuarina littoralis*, *Xanthorrhoea australis*, *Lomatia tinctoria*, *Hibbertia riparia*, *Lomandra longifolia*, *Pultenaea gunnii*, *Tetratheca pilosa*, *Lepidosperma laterale*, *Banksia marginata* and *Lissanthe strigosa*.

Protected slopes contain a deep (>1.40 m), stony, gradational soil with a clay loam surface over a yellowish red to yellowish brown, medium clay. This supports an open forest to tall, open forest dominated by *Eucalyptus obliqua* or occasionally by *Eucalyptus globulus*, over a dense understorey that includes *Acacia dealbata*, *Olearia lirata*, *Pomaderris apetala*, *Coprosma quadrifida*, *Polystichum proliferum*, *Pteridium esculentum*, *Pittosporum bicolor*, and an abundance of moss.

Steep, exposed, stony slopes have a shallow (0.50 m), duplex soil, with a clay loam surface over a yellowish brown, heavy clay. This supports a woodland dominated by *Eucalyptus amygdalina* and *Eucalyptus viminalis* with an open understorey that includes *Lomandra longifolia*, *Themeda australis*, *Lepidosperma laterale*, *Bursaria spinosa*, *Astroloma humifusum*, *Viola hederacea*, *Leptospermum scoparium*, *Casuarina monilifera* and *Pteridium esculentum*.

Marshes and swamps contain a deep (>1.40 m), gradational, black to light grey clay with a strong brown mottle. This supports scrub and heath dominated by *Leptospermum lanigerum*, *Callistemon viridiflorus* and *Gahnia grandis* and also includes *Hemarthria uncinata* and *Carex lynx*. Scattered individuals of *Eucalyptus ovata* and *Eucalyptus rodwayi* are also present.

The land is mainly utilised for forestry although grazing and recreation also occur. Some areas have been proposed for nature reservation by Duncan (1983) and O'Wheel (1984). The land is not particularly prone to erosion although gully erosion is sometimes evident on the lower slopes associated with drainage lines. Waterlogging and flooding hazards are associated with the marshes and swamps.