

Protected slopes in the Russell Falls (464141) Land System supporting an open forest dominated by Eucalyptus obliqua and Eucalyptus regnans with a rainforest understorey.



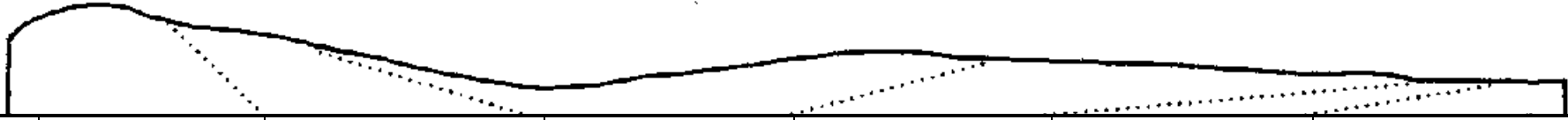
Protected slopes in the Russell Falls (464141) Land System supporting a tall open forest dominated by Eucalyptus regnans with a dense understorey of Olearia argophylla and Pomadourus apetala.



LAND SYSTEM
Russell Falls

464141

Area (ha)
3510



COMPONENT	A	B	C	D	E	F
PROPORTION(%)	10	10	35	35	5	5
RAINFALL (mm)	Approximate Annual Rainfall: 750-1000					
GEOLOGY	Permian Mudstone and Siltstone					
TOPOGRAPHY	Hills and Associated Alluvial Flats					
Position	Exposed Crests	Exposed Slopes	Protected Gullies/Slopes	Protected Slopes/Flats	Alluvial Flats	
Typical Slope ()	0-20	20	10-20	10	0	
NATIVE VEGETATION						
Structure	Woodland			(Tall) Open Forest		
Floristic Association (see Appendix 1 for common names)	Eucalyptus amygdalina	Eucalyptus amygdalina	Eucalyptus regnans	Eucalyptus obliqua	Eucalyptus obliqua	Eucalyptus obliqua
	Eucalyptus viminalis	Eucalyptus obliqua	Nothofagus cunninghamii	Eucalyptus regnans	Pteridium esculentum	Eucalyptus viminalis
	Epacris impressa	Pultenaea juniperina	Acacia dealbata	Acacia dealbata	Melaleuca squarrosa	Phebalium squameum
	Daviesia latifolia	Daviesia latifolia	Phebalium squameum	Pomaderris apetala	Leptospermum scoparium	Melaleuca squarrosa
	Acacia mearnsii	Haloragis teucrioides	Olearia argophylla	Gahnia grandis	Pultenaea juniperina	Gahnia grandis
	Pultenaea Juniperina	Exocarpos cupressiformis	Atherosperma moschatum	Olearia argophylla	Gahnia grandis	Acacia melanoxylon
	Exocarpos cupressiformis		Blechnum watsii	Acacia vermiciflua		Microsorium diversifolium
		Polystichum proliferum	Pteridium esculentum			
		Moss	Coprosma quadrifida			
		Dicksonia antarctica				
SOIL						
Surface(A)Texture	Fine Sandy Clay Loam.	Fine Sandy Clay Loam	Clay Loam	Clay Loam	Silty Clay Loam	Sandy Clay Loam
B Horizon (subsoil) Colour (moist) Texture and primary profile form	Shallow, stony, gravelly, fine sandy loam - Brown (10 YR 5/3) on bedrock.	Shallow, stony, fine sandy loam— Light brownish grey (2.5 Y 6/2) on bedrock.	Deep medium clay— Dark yellowish brown (10 YR 4/6) with light grey (10 YR 7/2) mottle.	Deep light clay - brown. (10 YR 5/3) to light olive brown (2.5 Y 5/4) to light yellowish brown (10 YR 6/4) with light grey (10 YR 6/1) mottle. Gradational.	Deep stony clay loam - strong brown (7.5 YR 4/6). Uniform.	Deep light to medium clay - light grey (10 YR 7/2) with dark yellowish brown (10 YR 4/6) mottle over a sandy clay loam - grey (10 YR 5/1) Complex.
		Uniform.	Duplex.			
Permeability	High	Moderate	Moderate	Moderate	Moderate	Moderate
Typical depth(m)	0.30	0.60	>1.40	>1.40	0.70	>1.40
LAND USE	Nature Conservation, Water Catchment, Forestry, Grazing					
HAZARDS	Moderate/High Sheet, Rill, Gully Erosion			Moderate Streambank Erosion, Flooding		

464141

RUSSELL FALLS

Mudstone hills and associated alluvial flats in the Tyenna River valley between National Park and Fitzgerald form the Russell Falls Land System.

Exposed crests have a shallow (0.30 m), uniform, brown, stony, gravelly, fine sandy loam developed on bedrock. This supports a woodland dominated by *Eucalyptus amygdalina* and *Eucalyptus viminalis* with a heathy open understorey that includes *Epacris impressa*, *Daviesia latifolia*, *Acacia mearnsii*, *Pultenaea juniperina* and *Exocarpos cupressiformis*.

Exposed slopes contain a shallow, (0.60 m), light brownish grey, stony, uniform, fine sandy loam developed on bedrock. This supports a woodland dominated by *Eucalyptus amygdalina* and *Eucalyptus obliqua* with a heathy, open understorey that includes *Pultenaea juniperina*, *Daviesia latifolia*, *Haloragis teucroides* and *Exocarpos cupressiformis*.

Protected gullies and slopes have a deep (>1.40 m), duplex soil with a clay loam surface over a dark yellowish brown clay with a light grey mottle. This supports an open forest to tall open forest dominated by *Eucalyptus regnans* with a dense rainforest understorey that includes *Nothofagus cunninghamii*, *Acacia dealbata*, *Phebalium squameum*, *Olearia argophylla*, *Atherosperma moschatum*, *Blechnum wattsii*, *Polystichum proliferum*, extensive areas of moss and *Dicksonia antarctica*,

Protected slopes and flats also contain a deep (>1.40 m), gradational soil with a clay loam surface over a brown, light olive brown or light yellowish brown clay with a light grey mottle. This supports an open forest to tall, open forest dominated by *Eucalyptus obliqua* and *Eucalyptus regnans* with a dense understorey that includes *Acacia dealbata*, *Pomaderris apetala*, *Gahnia grandis*, *Olearia argophylla*, *Acacia verniciflua*, *Pteridium esculentum* and *Coprosma quadrifida*.

Alluvial flats contain a deep (0.70 m), uniform, stony, strong brown clay loam. This supports an open forest dominated by *Eucalyptus obliqua* with a scrubby understorey that includes *Pteridium esculentum*, *Melaleuca squarrosa*, *Leptospermum scoparium*, *Pultenaea juniperina* and *Gahnia grandis*. Alluvial flats also contain a deep (>1.40 m), complex soil consisting of a sandy clay loam surface over a light grey clay with a dark yellowish brown mottle over a grey, sandy clay loam. This supports an open forest/tall open forest dominated by *Eucalyptus obliqua* and *Eucalyptus viminalis* with a scrubby understorey that includes *Phebalium squameum*, *Melaleuca squarrosa*, *Gahnia grandis*, *Acacia melanoxylon* and *Microsorium diversifolium*.

Forestry, grazing, nature conservation and water catchment are the major land uses in this land system. Soils are particularly prone to erosion problems. Sheet and rill erosion commonly occur on the crests and slopes whilst gully and streambank erosion are associated with the lower slopes and flats. Flooding hazards are associated with the river flats.

See photos on previous page(s).