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Waddamana

Boulders of Jurassic dolerite mantle the slopes of the steep Ouse River valley in the Waddamana Land system. It covers the middle reaches of this river in the south of the study area. Although it has many similarities with the Ouse River and Pine River land systems there are basic differences in soil characteristics and vegetation.

Soil profiles provide good evidence for periglacial solifluction conditions with extremely rocky conditions prevailing through most components. Along watercourses alluvium or river gravels occur. A minor outcrop of fossiliferous marine sediments (Lower Permian Supergroup) occurs at the bottom of the Ouse River Valley. Soils are usually brown, tend to be deep and have gradational profiles. The topsoil may be covered by 15 to 20 cm deep mats of organic matter at various stages of decomposition. In spite of their stony, rocky nature the soils are considered to be quite fertile as they support (or have the capacity to support) tall forests. Some upper slope positions have been cleared, notably on the western (sheltered) part of the land system. *Eucalyptus coccifera* is widespread throughout with *E. delegatensis* occurring on the lower components. The dominance of *E. coccifera* is probably indicative of cold air which drains from the higher country (to the north) on calm winter nights. *E. amygdalina* is scattered through the area and it is likely that hybrids of this species and *E. coccifera* occur in places. Understorey species form open heaths and although precipitation is probably high enough to support wet sclerophyll forests, temperatures seem to have a restrictive effect on understorey heights.

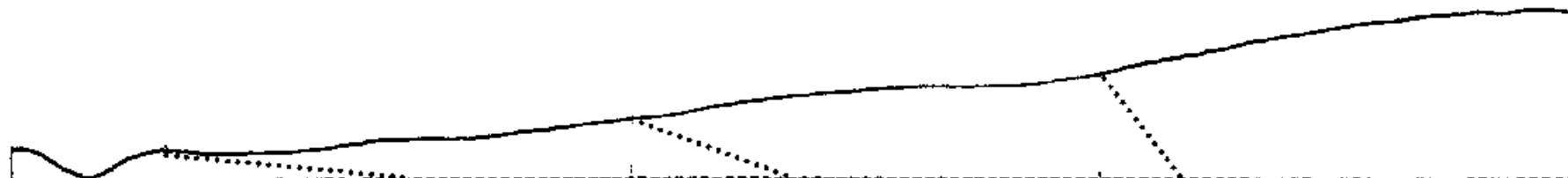
Land uses include forestry and grazing. Hazards include low to moderate sheet erosion with waterlogging and flooding likely on river banks. Streambank erosion is a potential hazard if increased runoff occurs as a result of extensive forest clearing.

LAND-SYSTEM

Waddamana

4 7 2 3 4 1

Area (ha):
3 5 4 6



COMPONENT	1	2	3	4
PROPORTION (%)	10	30	30	30
RAINFALL (mm)	Approximate Annual Rainfall: 750-1000			
GEOLOGY	Alluvium	1 Jurassic dolerite - Rock fragments on surface and in soil profiles		
TOPOGRAPHY		Steep river		
Position	Watercourses	Lower Scree Slopes	Mid Scree Slopes	Upper Slopes/Boulder Fields
Typical Slope()	10	20-30	10-20	20-30
NATIVE VEGETATION		---	(Tall) Open	(Tall) Open
Structure	(Tall) Open Forest	(Tall) Open Forest	Forest (remnant)	Forest (remnant)
Floristic Association (See Appendix 1 for common names)	Eucalyptus coccifera E. delegatensis Acacia dealbata Hakea lissosperma Cyathodes parvifolia Lissanthe montana Helichrysum hookeri Lomatia tinctoria Leptospermum lanigerum Plttosporua bicolor Helichrysum ledifolium Olearia phlogopappa Poa sp.	Eucalyptus coccifera E. amygdalina E. delegatensis Acacia dealbata Olearia phlogopappa Helichrysum ledifolium Pultenaea juniperina Cyathodes parvifolia	Eucalyptus coccifera E. delegatensis Acacia dealbata Cyathodes parvifolia Poa sp.	Eucalyptus coccifera Xcacla dealbata
SOIL Surface(A)Texture	Clay Loam	Clay Loam-Loam	Clay Loam	Clay Loam
B Horizon(subsoil) Colour (wet) Texture and primary profile form	Dark brown (7. 5 YR 3/2) sandy clay. Gradational.	Stony, gravelly, brown/ dark brown (7. 5 YR 4/4) to light yellowish brown (10 YR 6/4) sandy clay loam. Gradational.	Stony, gravelly, dark brown (10 YR 3/3) Light clay. Gradational.	Stony, gravelly, dark brown (7. 5 YR 3/2) light clay. Gradational.
Permeability	Moderate-Low	High-Moderate	Moderate	Moderate
Typical depth(m)	1. 20	>1. 00	>1. 00	0. 70
Depth(A)Horizon(m)	0. 20	0. 10-0. 20	0. 20	0. 10
LAND USE	Forestry, hydro-electric power generation			
HAZARDS	Low-moderate sheet erosion			