

# 938151

## GORDON RIVER

This land system stretches from Purgatory Gap across the lower and mid Gordon River to Innes Peak and along a narrow ridge to the headwaters of the Davey River. Detailed transect information on geology, geomorphology, soils and vegetation for parts of this land system are available from the Hydro-Electric Commission (1978) Lower Gordon River Scientific Survey Reports.

Folded Ordovician and Silurian to lower Devonian sediments have influenced the formation of prominent ridges and valleys on harder (sandstone, conglomerate) and softer (siltstone) rock types. The dissected ridges, which form the prominent gorge on the lower Gordon River, and narrow valleys are aligned in a north south direction and are covered by extensive tracts of rainforest with typical species including *Nothofagus cunninghamii*, *Eucryphia lucida* and *Atherosperma moschatum*. Eucalypts protrude through the forest canopy in places. Surface soils in these forests are usually dark reddish brown to dark brown fibrous peats, while lower horizons consist of rocky, gravelly, sandy clay loam units.

These mineral horizons are often referred to as colluvium. Ironpans and iron-oxide staining has been observed in some profiles (Tarvydas 1978). Deep alluvial deposits also support rainforest and have dark reddish brown organic soils. Sedgeland/heath and scrub occur on some slopes and on highland flats. An exposed slope to the west of Innes Peak was examined during this survey. It has probably been affected by fires which have frequently burnt the adjacent Birchs Inlet land system. Sedgeland/heath occurs on the top of the Elliott Range (800 m) which is the highest part of the land system. It is relatively exposed with a lack of vegetation and soil cover on the highest slopes and ridges. Ridge lines on the southerly extension of the land system also have sedgeland/heath or scrub cover. In the valley of the Orange River low ridges of resistant strata support scrub or forest perhaps due to better drainage.

This land system is covered by parts of the Lower Gordon/Franklin Wild Rivers National Park and the South West Conservation area. Streambank erosion is a problem on alluvial sites and the steep river valleys of this land system. In places soils on steeply dipping bedrock may be susceptible to landslips which restricts the development of thick soils or tall vegetation.

LAND SYSTEM  
GORDON RIVER

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Area(ha): 82607



Altitudinal range (m)	APPROXIMATE ANNUAL, RAINFALL (mm) >2500		
SITE NO. /ALTITUDE	(101/40/NE)(102/40/W)	(54/360/S) (55/320/-)	(72/480/W) (73/360/W)
m) /ASPECT			
TOPOGRAPHY	Dissected north/south trending ridges with softer strata restricted to valleys		
Position	Steep river valleys	Exposed slopes high flats/ridges	Protected slopes and crests
Typical Slope( )	10-40	0-20	20
Proportion (%)	40	30	30
GEOLOGY	Folded Ordovician sandstone, conglomerate and siltstone. Silurian to lower Devonian sandstone and siltstone		
NATIVE VEGETATION	Closed forest	Open to closed heath/scrub	Closed forest
Floristic	Nothofagus cunninghamii	Gymnoschoenus sphaerocephalus	Nathofagus cunninghamii
Associative	Atherosperma moschatum	Helichrysum numinulum	Atherosperma moschatum
n (See for common names)	Phyllocladus	Boronia parviflorus	Acacia melanoxylon
	Acacia melanoxylon	Lepyrodia tasmanica	Eucalyptus nitida
	A. verticillata	Stylidium	Richea pandanifolia
	Anodopetalum	Melaleuca squarrosa	Olearia personioides
	Richea pandanifolia	Leptospermum nitidum	Aristotelia peduncularis
	Blechnum watsii	Actinotus bellidioides	Archeria hirtella
	Lagarostrobos	Restio monocephalus	Blechnum watsii
	Dicksonia antarctica	R. australis	Dicksonia antarctica
	Acradenia frankliniae		Coprosma quadrifida
SOIL Surface (A or P horizon) Colour (moist) and	Dark reddish brown (5 YR 2.5/2) or dark brown (7.5 YR 3/2) fibrous peat	Dark reddish brown (5 YR 3/2) or dark brown (7.5 YR 3/4) fibrous peat over a very dark grey (10 YR 3/1) or	Dark brown (7.5 YR 3/2), very dark brown (10 YR 2/2) or dark reddish brown (5 YR 5/2) fibrous peat
Subsoil (or B horizon) colour (moist) and texture	Rocky to gravelly dark reddish brown (5 YR 3/2) sandy clay loam. Ironpan in places	Sandy gravels	Rocky to gravelly dark reddish brown (5 YR 3/2) sandy clay loam to brown (7.5 YR 5/2) clayey sand,
Primary Profile form	Complex (colluvium)	Organic	CtnpLex (colluvium)
Depth surface horizon(m)	0.15	0.25-0.40	0.10-0.25
Typical total depth(m)	0.60 - 2.50	0.40	0.60->3.00
Permeability	High	High	Moderate - High
LAND USE	Nature conservation, recreation		
HAZARD	High streambank erosion sheet erosion if burnt frequently	High	

Photo 66



Thick rainforest covers the valley in the Gordon River gorge upstream from Sir John Falls