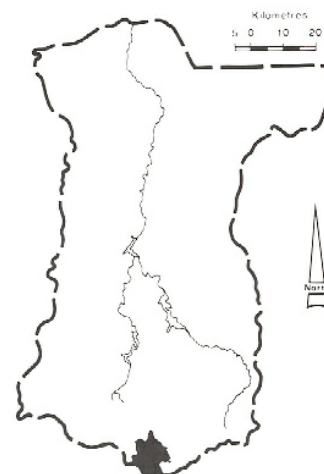


2.38 LrS2 LOW HILLS – rolling, SEDIMENTARY, type 2

Rolling low hills on sedimentary rocks occur around Creswick. The bedrock is highly weathered, with deep white kaolinitic layers frequently present beneath the soil profile. The weathered profiles have been protected from dissection by the existence of extensive lave flows to the north. Limited mining now extracts the highly weathered material. The area is characterised by the remnants of the intensive gold-mining activity that began in the mid nineteenth century. Pits, mines, mullock heaps and severe gully erosion are all legacies of these past exploits. Quartz stone layers, a result of mining and other land disturbances activities, overlie the original topsoils



Geology Oll – Ordovician sandstones, shales and slates

Rainfall 650-800 mm per annum

Slope Average 10%; range 2-30%

Dominant landform element (75%) Slope – moderate to steep, crest

Minor landform elements (25%) Drainage depression, alluvial flat, gentle lower slope, eroded gully, mullock heap

Soils Dominant: Dy3.22, Dy2.21, Dy2.22. Whole-coloured or faintly mottled yellow duplex soils on the gentler lower slopes and drainage depressions; the A₁ horizon, a weakly structured grey-brown sandy loam, grades into a pale yellowish-grey, fine sandy clay loam A₂; the transition to the pedal B horizon is clear but not abrupt, while the B horizon is often deep, usually 1 m, and grades into the weathered rock substrate; the soils are acidic to neutral throughout

Gn3.74, Gn3.71. Whole-coloured yellowish brown gradational soils predominate on the slopes and crests, and are essentially gradational versions of the duplex soils previously described; the grey-brown sandy loam topsoils, which frequently contain abundant quartz gravel, grade into yellowish brown clayey subsoils; A₂ horizons, if present, are pale but not bleached

Minor: Um, Gn3.91. Uniform loamy or yellowish-grey gradational soils occurring to a limited extent in the drainage depressions

Native vegetation An open forest II-III of predominantly *E. obliqua*; associated species include *E. radiata*, *E. rubida* and *E. viminalis* on the slopes, and *E. ovata* in some drainage depressions; the understorey is usually sparse, with frasses or bracken (*Pteridium esculentum*) common

Stone-rock outcrop Quartz gravel sometimes occurs on the surface, often brought there by mining activities, or as lag deposits remaining after erosion

Pans Nil or not observed

Land use Most of the land is used for forestry purposes – approximately half being retains as native forest and the rest planted to *Pinus radiata*; however, it still bears the scars of earlier gold-mining; limited mining of the weathered sedimentary rocks occurs near Creswick; a significant proportion of the north-west of the unit is covered by urban development and rural subdivisions

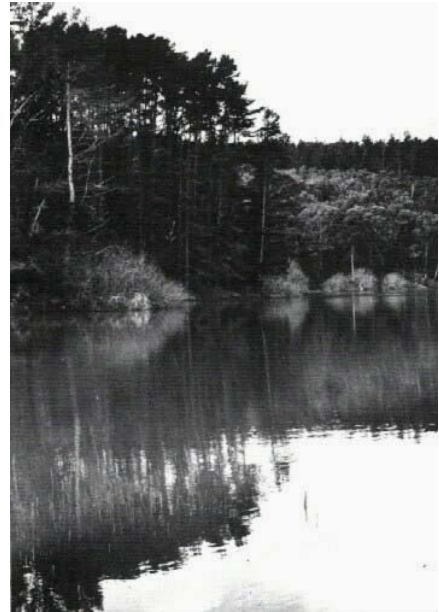
Observed land deterioration Sheet, rill, gully and streambank erosion, largely the result of past mining endeavours, are still evident, especially near Creswick; the gully erosion is severe in a number of areas

Susceptibility to land deterioration

- Gully erosion (high)
- Sheet and rill erosion (moderate)
- Streambank erosion (moderate)
- Salting (low)
- Compaction (low to moderate)



Severe gully erosion, initiated by earlier gold-mining activities, is common.



Plantations of radiata pine, common throughout this unit, here about the picturesque Lake St George.

The uneven contours on this detailed orienteering map (right) indicate the high level of ground disturbance caused by past mining endeavours in these presently forested areas.

- Legend**
-  contours
 -  embankment
 -  dry ditch - distinct-indistinct
 -  erosion gully
 -  broken ground
 -  area of dangerous mineshafts
 -  mineshaft or dangerous pit
 -  dirt road
 -  minor forest road, vehicle track

This map has been reproduced with the kind permission of the Eureka Orienteering Club.

