

### 2.32 Rg/uS3 RISES – gently undulating to undulating, SEDIMENTARY, type 3

Sedimentary terrain in the north-west of the study area is characterised by undulating rises, which are often clothed by mallee eucalypts. Much of the sedimentary rock has been metamorphosed by adjacent granitic plutons. The mallee species are most common on the steeper mid slopes and crests, and frequently replaced by non-mallee species on lower slopes. Red gradational or duplex soils predominate. They are often shallow and may contain profuse amounts of buckshot or iron impregnated stones.

Although native vegetation now covers most of the unit, the landscape still bears the scars of 19<sup>th</sup> century gold-mining. Gold-mining activity has had a resurgence in recent years in response to higher gold prices. Land use is restricted by the low water-holding capacity of the soils, coupled with their inherent low fertility. Many areas cleared for agriculture are now reverting to native scrub.

**Geology** Oll – Ordovician sandstone, shale and slate; ms – schist and other associated metamorphic rocks

**Rainfall** 375-475 mm per annum

**Dominant landform element** (90%) Crest, slope

**Minor landform elements** (10%) Drainage depression

**Soils** Dominant: Dr2.11, Dr2.21, Dr23.22, Dr2.22. Red duplex soils, frequently shallow and stony, with quartz gravel and/or ferruginised stone fragments common, especially in the A horizons where a pale A<sub>2</sub> horizon is often present; the subsoils are whole-coloured, although mottled variants do occur, and are neutral to acidic: the soils overlie weathered sedimentary rock, which may be indurated with iron

Minor: Dy3.32. Stony mottled yellow duplex soils on the lower slopes, representing poorer-drained variants of the red duplex soils; they are shallow to moderately deep, and typically have a pale A<sub>2</sub> horizon and a neutral subsoil

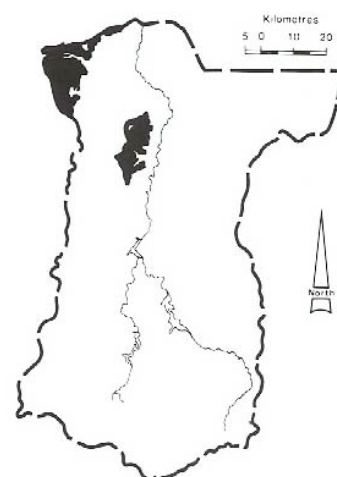
Gn4.14. Shallow stony red gradational soils, containing profuse amounts of quartz or ferruginised gravels, occur on the upper slopes and crests and have low water-holding capacity, as reflected in the mallee vegetation that grows on them

**Native vegetation** Mallee eucalypts are common, especially on the crests and mid to upper slopes, and reflect the low water holding capacity and low nutrient status of the soils; the major mallee species – *E. viridis*, *E. polybractea* and *E. behriana* – form an open to closed scrub; non-mallee eucalypts on the gentler slopes, presumably due to improved soil conditions, mainly comprise *E. microcarpa* and *E. leucoxydon* which form an open forest II

**Stone-rock outcrop** Average 2%, range 0-20%

**Pans** Although no hardpans were observed, the weathered regolith is frequently high in iron, and indurated hardpans may be present beneath the mallee vegetation type

**Land use** The native vegetation had been retained on most of the land, and parts of the mallee vegetation are periodically cut-over for eucalyptus-oil production, while the non-mallee eucalypts supply very limited quantities of timber for fenceposts and firewood; some cleared areas support low-productivity native pastures, but the native vegetation is recolonising other cleared areas north of Wedderburn: gold-prospecting with some associated mining is common activity; however, new mining techniques – characterised by stripping of the vegetation and topsoil from large area – are potential hazard to the environment and need to be carefully controlled



**Observed land deterioration** Moderate sheet erosion on many slopes, especially where disturbed by mining or agriculture

**Susceptibility to land deterioration**

Sheet erosion (moderate to high)

Gully erosion (low to moderate)

Salting (moderate)



*Mallee vegetation, much of it cut regularly for eucalyptus oil, is common.*