

2.22 RgG1 – RISES – gently undulating, GRANITIC, type 1

These gentle slopes flank the northern side of a metamorphic aureole ridge that extends in an arc south-west from Wedderburn to Inglewood. The soil parent material is predominantly granitic, although its origin is difficult to determine due to its highly weathered condition. The upper part of the weathered substrate is frequently cemented by sesquioxides and/or silica to form a hardpan. Where the hardpan is near the surface, especially on crests, mallee vegetation persists in that droughty situation. Red, yellow or brown duplex soils predominate.

Geology Dlg – Devonian granodiorite; minor Tp – Tertiary gravel, sand, silt and clay, often ferruginised; Qrc – Quaternary colluvium; ms – metamorphosed Ordovician sediments.

Rainfall 450 – 500 mm per year.

Slope Average 2%; range 1-4%

Dominant landform elements (95%) Crest, slope

Minor landform elements (5%) Drainage depression

Soils Dominant: Dy2.1, Dr2.1, Dr2.2, Db2.4. Red, brown or yellow duplex soils, usually with non-mottled subsoils, but sometimes with brown staining. A₂ horizons often present but rarely bleached: the topsoil is usually shallow, loamy and hardsetting and in some areas has been largely stripped by erosion

Minor: Uc. Youthful sandy alluvial soils in some drainage depressions, often as a recent sandy wash over the older duplex profiles.

Native vegetation An open scrub of mallee eucalypts in many areas, often indicating the presence of a hardpan at shallow depth with *E. viridis*, *E. polybractea* and *E. behriana* as the dominant species; *E. microcarpa* in a woodland II formation is the dominant non-mallee eucalypt

Stone-rock outcrop Nil

Pans Hardpans are often present – especially under mallee vegetation and in drainage depressions – composed primarily of cemented, highly weathered granitic material; agents of cementation appear to be sesquioxides and/or silica

Land use Grazing of sheep is the main use; others include cereal cropping and harvesting of the mallee eucalypts for oil production

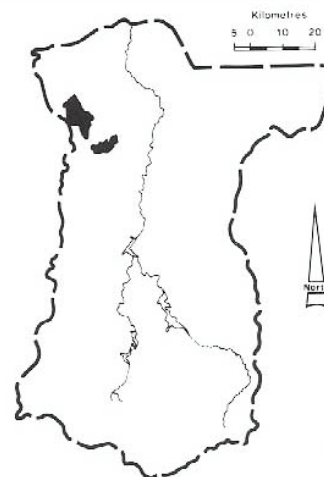
Observed land deterioration Sheet erosion is common, as is gully erosion in the depressions; the presence of a hardpan often restricts depth of gullying.

Susceptibility to land deterioration

Wind erosion (low to moderate)

Sheet and rill erosion (moderate)

Gully erosion (moderate)



The highly weathered granitic regolith, with hardpan and associated mallee vegetation, is visible in this road cutting.