

## 2.27 Rg/uG1 RISES – gently undulating to undulating, GRANITIC, type 1

Undulating terrain on granite occurs in the west of the study area between the Bealiba Range and the Black Ranges. Rock outcrop is common, especially on the upper slopes near the catchment divide. Most of the area is underlain by a siliceous hardpan that restricts the water-holding capacity and the perviousness of the soils. Red duplex soils are widespread, although shallow coarse sandy soils occur on the upper slopes.

**Geology** Dlg – Devonian granite, granodiorite

**Rainfall** 450-500 mm per annum

**Slope** Average 3%; range 2-15%

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

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

**Soils** Dominant: Dr2.41, Dr2.42. Red duplex soils, with anon-mottled acidic to neutral red subsoil and a bleached A<sub>2</sub> horizon, usually overlying a siliceous hardpan at 0.5-1.5 m below the surface; surface textures are sandy loams

Minor: Uc5.11. Uniform coarse sandy loam soils up to 0.5 m deep frequently occur among rock outcrop on the upper slopes

Dy3.42, Db2.42. Yellowish-brown coarsely structured duplex soils on the middle slopes and drainage depressions, overlying siliceous hardpans of the former; the hardsetting topsoils are sandy loams, and bleached A<sub>2</sub> horizons are usually present; subsoils are usually neutral to alkaline

**Native vegetation** Largely cleared for agricultural purposes, although originally the land probably carried a woodland II, of *E. microcarpa*, *E. leucoxyton* and *Casuarina luehmannii* other common species include *E. melliodora* and in depressions *E. camaldulensis*

**Stone-rock outcrop** Abundant rock outcrop (30%) on the upper slopes, although outcrop is uncommon on the gentler lower slopes

**Pans** A siliceous hardpan at about 0.5-1.5m below the surface underlies most of the landscape, with the exception of the shallow sandy soils on the upper slopes and crests; this restricts the water-holding capacity and perviousness of the soil and lowers the productivity of the land.

**Land use** Grazing, with some cropping on the middle to lower slopes; the country responds quickly to early-season rains, but the growing season is short and productivity is relatively low

**Observed land deterioration** Sheet and gully erosion, with some deposition of sediment in the lower depressions; any erosion is particularly significant in this land unit because of the shallowness of the soils above the hardpan

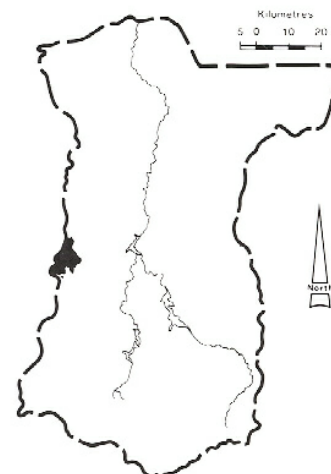
### **Susceptibility to land deterioration**

Sheet erosion (low to moderate)

Gully erosion (moderate)

Wind erosion (moderate)

Salting (low to moderate – depressions)



*Rock outcrops on the upper slopes of these granitic rises to the west of Mount Hooghly (background).*