

## **10. Ercildoun Plains Unit**

This unit is found on the Quaternary alluvium and colluvium from both Devonian granitic rock and Quaternary basalts in the south-east region of the study area. The soils in this unit are mostly brown gradational soils or dark, or yellow to brown duplex soils. The soils are often gritty (quartz and mica) reflecting the influence of the granitic parent materials, and have medium to heavy clay subsoils. Ironstone gravel and even laterite are found in some of the soils in this unit. The low lying areas in this unit are subject to periodic waterlogging.

**Geology:** Alluvium and colluvium from both Devonian granite and from Quaternary basalt.

**Slope:** 0-3%

**Landforms:** Plain, flat to gently sloping, broad drainage depressions.

### **Soils:**

**Dominant:** Gn4.31, Gn4.32. Moderate to strongly structured, brown, gritty (quartz and mica), gradational soils on the slopes. The root-holes in these soils are stained by iron oxides indicating the seasonal waterlogging of these soils. The subsoils are acidic to neutral and have medium to heavy clay textures.

Dd2.41, Dy3.41. Dark or yellow to brown duplex soils with medium to heavy clay subsoils. The A horizons tend to be hardsetting with fine sandy clay loam textures. The subsoils are acidic to neutral and often contain buckshot. Some soils had moderately hard iron oxide cemented buckshot layer at from 80 to 100 cm depth.

See appendices 18 and 19 for typical soil profile descriptions from this unit.

**Stone rock outcrop:** 0-1%

**Pans:** The duplex soils in the drainage lines often contain hard iron oxide cemented pans at around 1 metre's depth.

**Land use:** Predominantly grazing.

**Observed land deterioration:** The land is waterlogged during the wet periods and is subject to compaction from grazing. There was some minor gully erosion on the upper slopes of this unit.

### **Susceptibility to land deterioration:**

Compaction (moderate)

Gully erosion (low)

### **Land capability classification:**

Generally, land capability class 3 with drainage as the determinant factor (see Table 1).