2.10 PgB2 PLAINS – gently undulating, BASALTIC, type 2

This map unit to the west of the Cairn Curran Reservoir covers a section of the extensive lave plains that occur throughout the south of the study area. The plain is gently undulating and generally featureless, with surface rock uncommon – except on occasional rises or scarps where dissection is more severe, especially on the eastern and western edges. Deep leads beneath the plain were exploited during the late nineteenth century to extract alluvial gold, and in some areas mullock heaps remain as testaments to those endeavours. Red gradational or duplex soils are characteristic, although heavier soils occur in the lower lying areas. The native vegetation has been extensively cleared and grazing and cropping are the main land uses

Geology Qvn – Quaternary olivine basalt

Rainfall 450 - 550 mm per annum

Dominant landform element (80%) Plain, flat to gently sloping

Minor landform elements (20%) Scarp, scarp footslope, closed depression, broad drainage depression, rocky rise

Soils Dominant: Gn3.12, Gn2.22, Gn4.12, Gn3.14. Structured red gradational soils occur on the better-drained broad crests and slopes; a pale A₂ horizon may be present and may contain buckshot: subsoils are acidic to neutral: soil depth is variable, ranging from extremely shallow and stony on the scarps to greater than 1.2m on the gently sloping parts of the plain

Dr2.22, Dr3.21, Dr3.22, Db3.22. Red duplex soils occur in conjunction with the red gradational soils on the better-drained parts of the plain, although absent from the scarps, with loamy A_1 horizons and usually a pale silty loam A_2 that frequently contains buckshot: subsoils are red, mottled or non-mottled, and usually neutral to acidic at depth and brown variants occasionally occur: the red gradational and rd duplex soils frequently grade into one another

Sub dominant: Ug5.2, Ug5.3. Grey or brown uniform cracking clays occur on the poorer-drained, flatter parts of the plain and in broad drainage depressions; a gilgaied micro-relief is common

Minor: Gn3.92, Dy3, Dy2. Whole-coloured or mottled yellow gradational to duplex soils occasionally occur in poorer-drained parts of the plain. Such as in closed depressions; buckshot also occurs throughout many of the profiles, reflecting the poorer drainage status of these soils

Native vegetation Cleared from this map unit, apart from isolated specimens of *E. microcarpa* and *Casuarina luehmannii* and *E. camaldulensis* in areas of poorer drainage

Stone-rock outcrop Average 0-2%; although up to 20% on scarps

Pans Nil or not observed

Land use Predominantly grazing on introduced pastures and cropping of cereals and fodder species

Observed land deterioration The map unit is very stable, with only minor evidence of sheet erosion on the scarps and compaction of the topsoils; in recent years limited areas of saline seeps have developed in some depressions

Susceptibility to land deterioration Compaction (moderate to high) Sheet erosion (low – slopes; moderate – scarps) Salting (low to moderate)



The extensive basaltic plains around Moolort provide valuable grazing and cropping land.