

2.7 P1B PLAINS – level, BASALTIC

The flat-topped hill of Quaternary basalt known as the Guildford plateau is the largest individual remnant of a more extensive lava plain that once extended down the ancestral Loddon River valley. It is possible that the Muckleford Fault, which passes through the western part of the plateau, caused the lava flow to bank up at Guildford. Subsequent dissection by the Loddon River has formed pronounced scarps along the southern edge of the plateau.

The soils of the plain are grey, clayey and gilgaied and contrast with shallow stony soils of the surrounding scarps. The native vegetation has been almost totally cleared.

Geology Qvn – Quaternary basalt

Rainfall 550-600 mm per annum

Slope Average 0%; range 0-2%(plain), 10-50% (scarp)

Dominant landform element (90%) Plain

Minor landform elements (10%) Scarp, scarp footslope, drainage depression

Soils Dominant: Ug5.2. Heavy grey cracking clay soils of uniform or gradational texture predominate on the plain; a gilgaied micro-relief

Minor: Gn4, Um. Shallow stony brown soils of uniform or gradational texture trend on the steeply sloping scarps bordering the plateau; on the lower slopes the soils often form in basaltic colluvium overlying Tertiary alluvium or weathered Ordovician sedimentary rocks.

Native vegetation Almost totally cleared, except for occasional specimens of *E. microcarpa* on the plain and isolated bushes of *Hymenanthera dentata* on the scarps

Stone-rock outcrop Nil on the plain, 10-50% on the scarps

Pans Nil or not observed

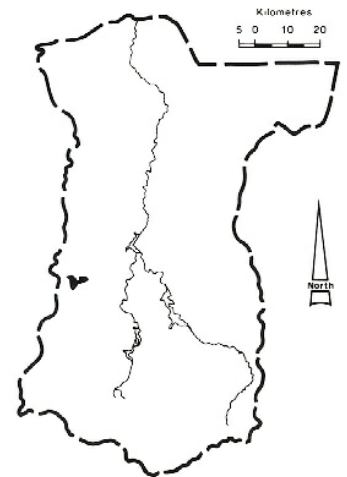
Land use Predominantly grazing, with minor cereal-cropping

Observed land deterioration No deterioration observed on the plain; minor slumping and sheet wash or material on the scarps

Susceptibility to land deterioration

Landslides (low to moderate – scarps)

Sheet erosion (moderated to high – scarps)



The level basaltic plain of the Guildford Plateau (right) has pronounced scarps along its southern edge.