

2.47 EB ENTRENCHED VALLEY, BASALTIC

Stream dissection of the extensive undulating basalt plains in the south has resulted in several steep-sided stream valleys within and bordering the basalt flows. In most mapping units these steep slopes have been included as an unmapped landform element; however, the valleys of Tullaroop creek and parts of Birch and Creswick Creeks, which involve significant areas of steep dissected slopes, are described separately in this unit. The valleys have steep upper slopes just below the valley rim, with gentler slopes of basaltic rubble (and in some instances exposed underlying Ordovician bedrock) on the lower slopes. Narrow alluvial flats run alongside the streams.

The soils are generally shallow and variable, and land use is limited by the steep, rocky and generally inaccessible nature of the unit.

Geology Qvn – Quaternary basalt; minor O1 – Ordovician sandstones, shales and slates

Rainfall 5560-650 mm per annum

Slope Average 30%; range 10-100%, occasionally precipitous

Dominant landform element (80%) Scarp, scarp footslope

Minor landform elements (20%) Bench, cliff, alluvial flat, stream channel

Soils Um, Uf, Gn3.1. Shallow stony red or brown soils predominate; they are frequently reddish brown structured uniform loams on the steeper slopes, containing abundant stone, but better-developed and deeper red-reddish brown gradational soils on the gentler slopes; shallow, dark, well-structured uniform clay soils occur in the north, and deeper alluvial soils on the occasional alluvial flats

Native vegetation Mostly cleared; however, isolated specimens of *Hymenanthera dentata* and *Acacia implexa* occur among the rock outcrop on the scarps. *E. camaldulensis* grows along the streams

Stone-rock outcrop 20%, but extremely variable

Pans Nil or not observed

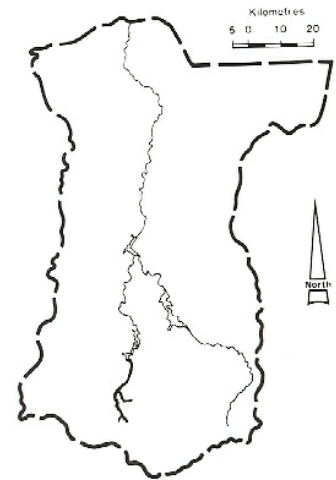
Land use The steep slopes preclude most land uses except low intensity grazing; the occasional narrow alluvial flats have good cropping soils, but are only used where access can be gained; weed and vermin, particularly thistles and rabbits, are almost impossible to eradicate

Observed land deterioration Minor sheet erosion and landslipping

Susceptibility to land deterioration

Sheet erosion (moderate to high)

Slope failure (moderate)



Tullaroop Creek south of Tullaroop Reservoir has dissected approximately 30 metres below the surrounding plains.



The narrow valley of Birch Creek has cut into the almost flat basaltic plains west of Clunes.