

2.25 RgS1 RISES – gently undulating, SEDIMENTARY, type 1

A number of gently undulating areas on Ordovician sedimentary rocks occur to the north and west of Bendigo. Rock outcrop is uncommon and the area has been largely cleared for cropping and grazing. The topsoils of the predominant red duplex soils are prone to compaction and surface sealing, resulting in increased run-off and sheet and rill erosion in cultivated areas. A significant area of the box-gum-ironbark forest had been retained in the northern part of the Kamarooka State Forest.

Geology Olm, Olb, Ola, Oll, Olh – Ordovician sandstone, shale and slate

Rainfall 400-500 mm per annum

Dominant landform element (95%) Broad crest, gentle slope, drainage depression

Minor landform elements (5%) Sharp crest

Soils Dominant: Dr2.21, Dr2.22, Dr2.23, Dr2.11, Dr2.12, Dr2.13. Red duplex soils with brown sandy loam to loam, weakly structured topsoils throughout; A₂ horizons, if present, are not bleached and the subsoils are red and generally mottle-free; stone fragments may occur throughout the profile

Minor: Gn3, Dy, Db, Dr3.3. On the sharper crests, stony red gradational soils: on lower slopes and depressions, red, brown or yellow duplex soils may occur, possibly with a mottled subsoil and/or a gravelly bleached A₂; in drainage depressions the soil type and depth are extremely variable, and evidence of alluvial layering may be present through the profile

Native vegetation A major proportion of the original woodland II to open forest II of *E. microcarpa*, *E. sideroxylon* and *E. leucoxylon* has been cleared; *E. camaldulensis* occurs in the drainage depressions

Stone-rock outcrop Average 0%; range 0-2%

Pans Nil or not observed

Land use Cereal-cropping and grazing are the major land uses; in the northern part of the Kamarooka State Park an area of the box-gum-ironbark, characteristic of the northern slopes, has been retained

Observed land deterioration Minor sheet erosion and, in extreme condition wind erosion; salting is common and severe on the lower slopes and depressions near Kamarooka and gully erosion also occurs in many drainage depressions

Susceptibility to land deterioration

Sheet erosion (moderate)

Wind erosion (low)

Salting (moderate to high)

Gully erosion (moderate)

Compaction/surface sealing (moderate)



The gentle slopes with red duplex soils are favoured for cereal-cropping.