

OLC Overland Corner Land System

Undulating stony flats and rises with sandhills east of Overland Corner

Area: 72.3 km²

Annual rainfall: 240 – 255 mm average

Geology: The land is underlain by mixed Bakara calcretes and soft to rubbly carbonates of the Woorinen Formation. The calcareous materials are partly overlain by windblown Molineaux Sands.

Topography: The landscape is gently undulating with stony flats and low rises predominant, overlain in places by low to moderate irregular sandhills.

Elevation: 20 - 50 m

Relief: Up to 20 m

Soils: Calcareous soils predominate. Moderately deep and shallow loamy sands are extensive, with sands on low dunes.

Main soils

Flats and rises

A4 Calcareous loamy sand

B2 Shallow calcareous loamy sand over sheet calcrete

Sandhills

H2 Deep slightly calcareous sand

Main features: Most of the Overland Corner Land System is not farmed due to its low rainfall. The arable areas tend to be along the southern margin adjacent to the River Murray where there is some irrigation as well as dryland cropping. The main features of the land are the extent of stony soils, many of which would be too shallow for cropping even if the rainfall was higher, and the relatively (for the northern mallee) small proportion of sandhills.



Soil Landscape Unit summary: 7 Soil Landscape Units (SLUs) mapped in the Overland Corner Land System:

SLU	% of area	Main features #
QMA	13.7	Stony flats and depressions. Main soil: <u>shallow calcareous loamy sand over sheet calcrete</u> - B2 (D). These soils are too stony for cropping.
QVA QVB QYB QYL	10.0 28.2 4.2 3.1	Flats and gently undulating low rises formed on mixed sheet and rubbly calcrete, and overlain by up to 30% low sandhills. Up to 30% of the area is very stony. QVA Flats. QVB Gently undulating rises and flats with less than 10% low sandhills. QYB Gently undulating low rises with 10-30% sandhills. QYL Gentle slopes with 10-30% sandhills and minor saline patches. Main soils: <u>calcareous loamy sand</u> - A4 (E), with <u>shallow calcareous loamy sand over sheet calcrete</u> - B2 (L) on very stony areas, and <u>deep slightly calcareous sand</u> - H2 (M-C) on low sand hills. This land is less stony than QMA, but the typical soils are nevertheless shallow, with up to 30% of the area too stony for cropping. The main limitation on the arable land is restricted waterholding capacity. The sandy rises are prone to wind erosion and water repellence, and are less fertile than the heavier soils.
UJe UJf	6.1 34.7	Dunefields of low to moderate irregular sandhills superimposed over stony flats and rises. UJe 30-60% moderate sandhills. UJf 30-60% low sandhills. Main soils: <u>deep slightly calcareous sand</u> - H2 (E) on sandhills, with <u>calcareous loamy sand</u> - A4 (E), and <u>shallow calcareous loamy sand over sheet calcrete</u> - B2 (L) on flats and rises between the sandhills. The sandy soils are infertile and prone to wind erosion, particularly in UJe. They are poor cropping soils but suitable for irrigation. The soils between the sandhills are similar to those in QYB (above).

PROPORTION codes assigned to soils within Soil Landscape Units (SLU):

- | | |
|----------------------------------------------|---------------------------------------|
| (D) Dominant in extent (>90% of SLU) | (C) Common in extent (20–30% of SLU) |
| (V) Very extensive in extent (60–90% of SLU) | (L) Limited in extent (10–20% of SLU) |
| (E) Extensive in extent (30–60% of SLU) | (M) Minor in extent (<10% of SLU) |

Detailed soil profile descriptions:

- A4** Calcareous loamy sand (Regolithic, Calcic / Lithocalcic Calcarosol)
Medium thickness sand to sandy loam grading to a friable red sandy clay loam over soft to rubbly carbonate at depths ranging from 45 to 75 cm. This grades to highly calcareous sandy clay loam with depth.
- B2** Shallow calcareous loamy sand over sheet calcrete (Petrocalcic Calcarosol)
Medium thickness calcareous sand to sandy loam grading to sandy clay loam over hard calcrete at depths ranging from between 25 and 40 cm.
- H2** Deep slightly calcareous sand (Regolithic, Hypocalcic Calcarosol)
Very thick reddish slightly calcareous sand, with segregations of soft carbonate at variable depth depending on erosional history. May be sandy for several metres.

Further information: [DEWNR Soil and Land Program](#)

